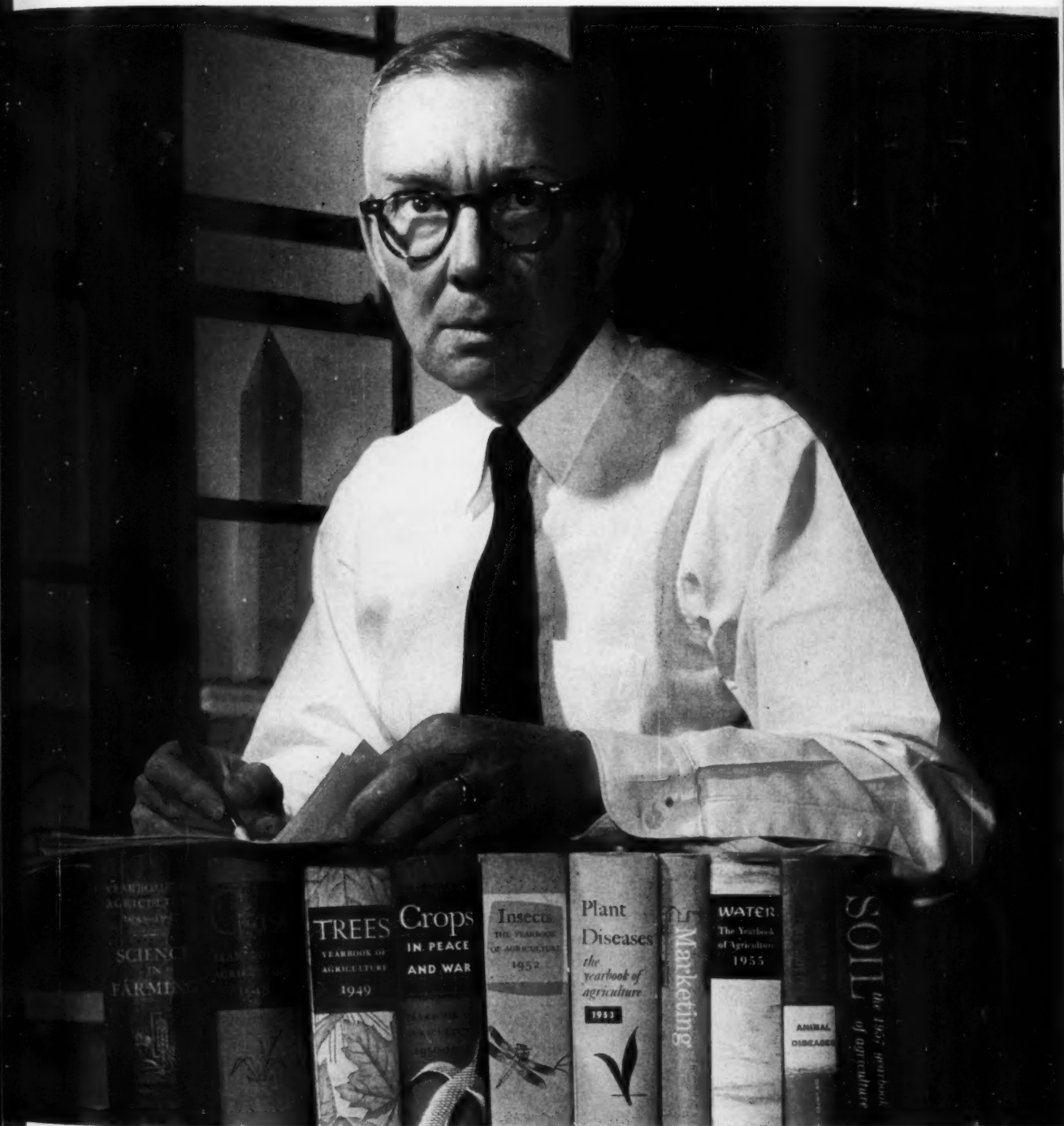


American

FORESTS

APRIL, 1958

50 CENTS



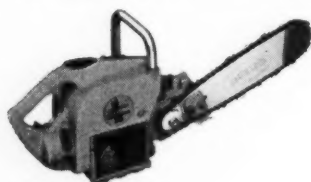
MONUMENTS TO AN EDITOR

World of Words By WILL BARKER | page 19

Choosing a chain saw

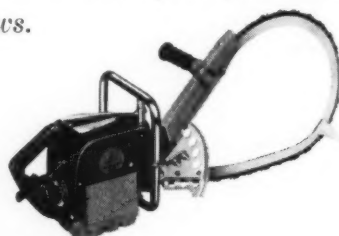


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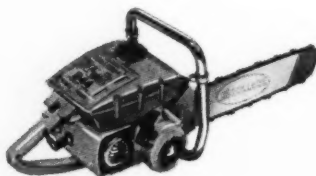
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Efficiency of different methods and machines compared in thorough on-the-job tests near Brunswick, Ga.

Last year, in close co-operation with the Brunswick Pulp & Paper Co., Caterpillar Tractor Co. conducted a comprehensive three months' study of different forest site preparation meth-

ods near Brunswick, Ga. Some 700 acres in three areas were cleared and planted in trees. Six rugged track-type Caterpillar Diesel machines, ranging in horsepower from 63 to 320 HP,

were used. Attachments included Rome offset disc harrows, Fleco rakes, Hyster winches, an anchor-type chain and stumpers and cab guards. Each machine and attachment worked the length of time needed to provide a "dollars and cents" yardstick of production results. Some operational pictures are shown here. The results have been compiled on the following subjects: Stump Treatment; Stump Clearing and Tree Cutting; Chaining; Raking and Windrowing; Harrowing. For information, contact your nearby Caterpillar Dealer who can provide further assistance on this subject.

Caterpillar Tractor Co., Peoria, Illinois, U. S. A.

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Before: One of three areas selected for the project. In general, ground conditions ranged from sandy to marshy. In one area, pine and palmetto were predominant; in another, hammock land with mixed pine and hardwoods; and in the third, upland hardwood, mixed pine, palmetto and brush. Despite some rain, tractor footing in general was good.



Shearing and Stumping: A CAT D8 Tractor with a Rome K-G blade at work in dry sandy soil, cleared except for standing live oaks ranging in diameter from 18" to 81". The remaining trees were hit by the stinger at a height of 3' to 4' above ground level, sliced and pushed over. Stumps were then sheared at ground level by the stinger and cutting edge in one or several passes.



Raked and Windrowed: Typical area after raking and windrowing. Machines used: Caterpillar D9, D8 and D7 Tractors and No. 977 Traxcavator with rakes. The more dense areas were cleared by the D9, the less dense by the other machines. Cover consisted of live oak and mixed hardwood with an understory of palmetto, gallberry, myrtle and vines.



Harrowing: A D8 with heavy-duty offset harrow on the job after an area of upland hardwood, mixed pine and heavy brush had been chained, raked and stumps cut at ground level. The number of passes — one or two — on an operation like this is up to the individual forest owner. After preparation, areas were planted by a D4 and tree planter.



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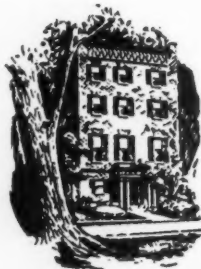
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 Agriculture." Photo by Vince Finnigan

The AFA

The American Forestry Association, publishers of *American Forests*, is a national organization — independent and non-political in character — for the advancement of intelligent management and use of forests and related resources of soil, water, wildlife and outdoor recreation. Its purpose is to create an enlightened public appreciation of these resources and the part they play in the social and economic life of the nation. Created in 1875, it is the oldest national forest conservation organization in America.



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Forest Forum

Watersheds in Utah

EDITOR:

May I congratulate you most heartily for your frank and clear discussion of the Utah watershed controversy in your column "What's News Across the Nation" in the February issue of *AMERICAN FORESTS*.

You expressed the situation in ringing terms and put your finger on the underlying issue. It should cause the stockmen of Utah to sit up and take notice when the official organ of The American Forestry Association expresses the concern of this temperate and sound national organization.

Ernest H. Linford
The Salt Lake Tribune
Salt Lake City 10, Utah

(This is praise indeed coming from Chief Editorial Writer Linford, an AFA Distinguished Service Award winner, whose newspaper has led the fight for sane management of Utah watersheds.—Editor)

EDITOR:

I am a student in general forestry here at Utah State University. I am also a member of The American Forestry Association.

I have read your last article, "What's News Across the Nation," in the *AMERICAN FORESTS* magazine. I wish to commend you on this fine piece of writing. I thought that it was a superlative statement of the facts.

In my estimation it is watershed that Utah is in need of; more than grazing land. It seems that every time someone in the Agriculture Department plans to improve the watershed situation here in Utah the cattlemen block the plan. Then let there be a hot, dry summer and who is the first to complain that the Agriculture Department is not managing the watersheds so as there is enough water for their cattle.

I again commend you for your article and only wish that more of the people out here could read what you and The American Forestry Association have to say.

Theodore Kaufmann
Utah State University
Logan, Utah

Our Social Responsibilities

EDITOR:

In the January issue of "*AMERICAN FORESTS*," Dr. Walter P. Cottam is quoted as observing that "in the eleven western states cattle depend on all of the national forests for only 3.6 percent of their feed. . . ."

Considering that not all cattle are permitted on the forests, and then only for a period of three to five months, such a figure could be arrived at—and there the matter could rest.

But this is like saying that because only

15 or 20 million automobiles use our highways, and then for only a few hours each day, then our highways are insignificant in importance to the 172 million persons who could otherwise use those rights-of-way for parks or game preserves.

Obviously, Dr. Cottam's reference to the dependence of western cattle on forest forage underestimates the real value to the nation which far exceeds any 3.6 percent. In key areas of the West, those cattle on the forests are the mainstay of entire economies—and they produce far more food value for the nation than the grass which could indeed remain in primeval glory if that should serve our wants and needs better.

A glance at a map of the West which would overlay forest lands, topography, population, etc., will indicate fully the importance of the forest grazing lands to entire states. Take Utah for example. The forests are adjacent to almost the entire crop production and population centers of that state. This is logical because populations and crops depend upon water, and water is almost exclusively secured from the runoff from the high country—the usual forest lands.

This "3.6 percent" has other aspects which far outweigh the "insignificant" label Dr. Cottam places on it. Basically, these are cows eating up this percentage—and cows are producers of new wealth each year. Many of the cattle "counted" in arriving at his figure are feedlot or pasture cattle. A fairer comparison indeed would be one which would match forest-grazed cows with the other cow herds of the western states. Actually, about 18 percent of all the beef cows in the 11 states are included in the cattle grazing on forests.

His statement also is incomplete because that 3.6 percent of the feed intake is obviously during the crucial growing months. Also, it is during the summer grazing months that the rancher puts up hay for winter use and rests his pastures for fall, winter and spring use. If a rancher is denied the extra pasturage, he could not run even half (according to a recent survey by the Denver Chamber of Commerce) of the number of cattle. He would have to use his hay meadows for year-round pasture, or cut his herd size sufficiently to allow him to put up carry-over feed. Forest grazing is considered as supplemental to the deeded or leased lands the rancher holds—"commensurate" but, practically, the ranch is usually not a complete economic unit without the extra facilities the rancher can rent on the forests.

It has been the history of the Forest Service that grazing allotments are constantly cut, seldom increased, even though agronomists and conservationists agree that many ranges are in far better condition than when in their "natural state." To a

permittee with 100 head—and many are allowed far less—a cut of 20 percent, for instance, is serious indeed. Such a cut would not necessarily mean a simple, similar cut in his gross—it would be even greater because of the inefficiencies encountered in labor costs, bull costs, taxes, depreciation on improvements and equipment, etc. And on many forests, cuts of 20 percent or more are not uncommon for several years in a row.

Is it any wonder that many ranchers give up the fight and sell out? Many small family ranches become one large operation, denuding the community and disrupting the mores, the economics and the general well-being of whole areas.

We wonder too, if it has occurred to those wishing to deprive the West of grazing privileges that such denial would have far greater impact on vast areas than just the bankruptcy or failure of many ranchers. Although those lands in the forests do not "pay" taxes for local, county and state governments, they do provide the means for creating wealth upon which tax revenues can be based. They provide for maximum use of surrounding lands which are, of course, taxable, and they do develop income upon which substantial taxes are paid.

Forests also provide for support of nearby counties through the rebate of a portion of forest utilization revenues. Such rebates, directly or indirectly, help build roads, schools, hospitals, etc. Without that income, the tax burden on deeded property would be increased—because few services and facilities of any government historically go down. With added taxes and fewer cattle, the rancher would quickly find himself in a squeeze which could lead him in only one direction—out.

Another situation which has not crossed the minds of "wilderness preservers" or recreationists is that the rancher has contributed much to the entire economy and well-being of his area far in excess of his actual tax contribution. By building roads, developing water resources, fencing, etc., on his allotment—for which he seldom, if ever, is reimbursed and on which he has no assurance of being able to gain full use over the years—he has opened up recreation areas and enabled others to develop additional wealth through utilization of mineral, timber and water resources.

Despite the emotional pressure for increased recreational and wildlife development of the forests, the multiple-use principle must be preserved for several reasons. For one thing, the basic economy of large numbers of western communities, counties and states depend greatly upon healthy ranching, mining and timber industries—tourist and recreation income fluctuates with the national economy, the weather

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'Pros' Go For The Chain Marked "O" —

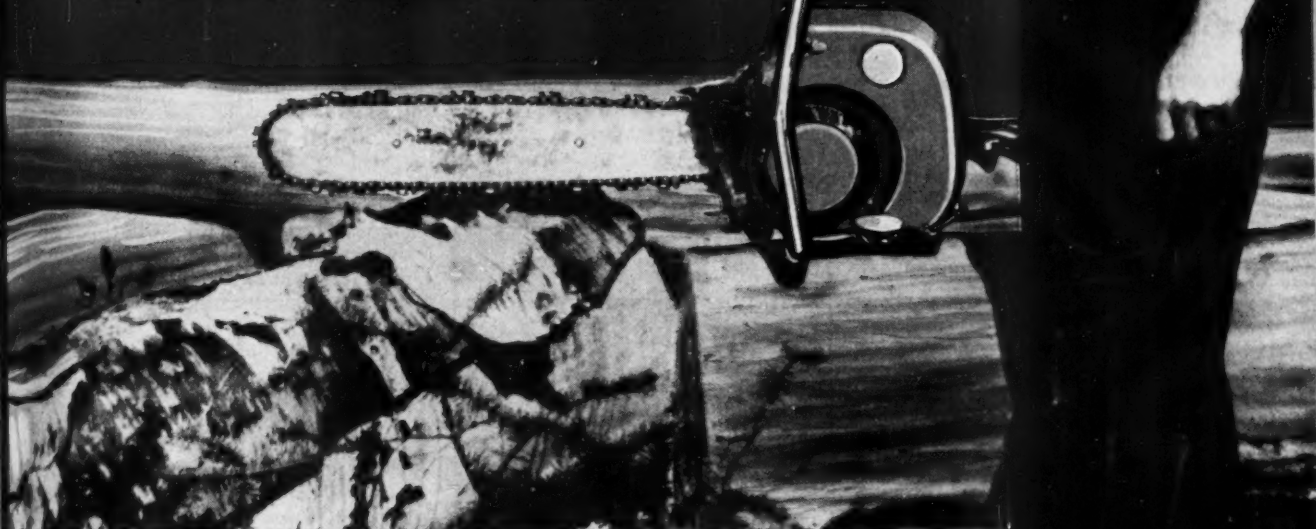


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ROBERT HODGKINS

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AFA BOARD MEETS



Don P. Johnston was re-elected president of the association

THE Directors of The American Forestry Association at their February 24, 1958, board meeting made the following recommendations regarding legislation now being considered by Congress:

Bills Endorsed

S. 3051. To provide an alternative to federal acquisition of the Klamath reservation by permitting private purchase at the appraised value with agreement to a 75-year sustained-yield covenant. Department of Interior proposal.

The Directors said: "This difficult, many-sided problem has been answered in Secretary Seaton's proposal. If adopted, it will assure achievement of the objectives of AFA's 1957 plea for continued sustained forest production."

S. 2447, Study of the Effects of Insecticides, Herbicides and Fungicides on Fish and Wildlife. Approved in principle by AFA in 1957.

In a statement before the Senate Subcommittee on Merchant Marine and Fisheries on March 6, 1958, the association "urged that the scope of this research be broadened to include the entire field of insect and disease control and to embrace all agencies with a responsibility for any phase of this vital work.

"The entire subject is one of grave importance. Its urgency can not be minimized. Not only is it necessary to determine the effect of various chemicals upon fish and wildlife, but it is necessary to control destructive insects and diseases. Otherwise the forests that provide a haven for wildlife as well as protection for the headwaters of streams will in themselves be destroyed."

Bills Opposed

S. 2496, H.R. 8631, H.R. 8744, H.R. 8747. To amend the Coordination Act. These proposals provide that whenever any stream or body of water is to be controlled for any purpose whatever by any agency of the United States, such agency first shall consult with the Fish and Wildlife Service regarding improvement of wildlife resources.

This over-layer of authority would nullify part of the responsibility

already assigned the Forest Service for orderly development and multiple use of national forests.

S. 2466, H.R. 8625, H. R. 8718. Repeal of Public Law 273, The Sustained Yield Act. This act is designed to keep forests continuously productive for the benefit of forest-dependent communities. One cooperative and five federal sustained yield units have been established successfully.

Repeal of this act, even though specifically exempting existing Sustained Yield Units, might jeopardize the future welfare of dependent communities. Therefore, the statutory authority contained in P. L. 273 should be continued.

S. 2579. Establishment of State Land Study Commissions and a National Board of Review. Introduced by Senator Long, of Louisiana. The board opposed this bill for four specific reasons. They are: 1) It deals only with certain classes of federal lands rather than with the entire land ownership situation; 2) It fails to give the federal commission created by the bill authority to initiate land ownership studies, and limits its function to the review of recommendations by the state commissions; 3) It permits changes in boundaries of federal lands recommended by the President to become effective unless vetoed by Congress within 90 days instead of requiring positive approval by Congress; 4) It is not in accord with the AFA's proposal for a broad study of the entire land ownership situation, at the national level, by a committee composed of members of Congress.

In explanation of AFA's Program for American Forestry, the Directors said: "The American Forestry Association recognizes that ownership is the major factor which controls land management, and it is therefore of fundamental importance. The association reaffirms the recommendation in its 1954 Program for American Forestry for national and state-by-state studies of forest and other wildland ownership patterns, policies, and problems. Its experience in the exploratory study of land

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Emphatic Action By Board On Indians Praised by Seaton

"It was gratifying to learn that the directors of The American Forestry Association have formally endorsed the legislation (S. 3051) proposed by the Department of the Interior to govern the disposal of the timber lands of the Klamath Indian Reservation.

"As your resolution confirms, we believe that our proposal is the best answer to the difficult and many-sided problem of assuring that the Indians will receive the fair market value of the part of forest which is sold and that sustained-yield management of the forest will be continued.

"The unanimous and emphatic action of the Board of Directors of your association should be most helpful in speeding Congressional action on this difficult question."

Fred A. Seaton
Secretary of the Interior

Conservation Stamp to be Issued at Tucson

Post Office Department Transfers First Day Sale of Forest Conservation

Commemorative Stamp to First Day of AFA Convention at Tucson, Arizona

THE Post Office Department on March 29 announced the transfer of the First-Day sale on October 27, 1958, of the Forest Conservation commemorative stamp from Washington, D.C., to Tucson, Arizona.

First-day sale ceremonies in Tucson, Arizona, will be held at the opening session of the 83rd Annual Meeting of The American Forestry Association. October 27th is the 100th anniversary of the birth of President Theodore Roosevelt, the American most responsible for the creation of the national forests and who has been referred to as the "Father of Conservation" in America.

Members of the Natural Resources Council of America also meeting in Arizona at that time as well as representatives of the Forest Service, the forestry industry, and forestry conservation programs will be invited to participate in the first-day sale ceremonies.

The American Forestry Association plans to make the commemorative ceremony one of the most memorable events in its long history. With membership in the association at an all-time high of 30,000, it is believed that the Tucson meeting will be one of the largest in history.

Overall theme of the meeting will

be "Water, Forests and People" all subjects in which TR was intensely interested. A key speaker will be Richard E. McArdle, Chief of the Forest Service, and successor of Gifford Pinchot, the first chief who was TR's closest conservation advisor.

As a special attraction, a Conservation Caravan to the convention will be made up at Chicago open to all members and friends of the association. A special effort is being made to enlist "Old Timers" in the Forest Service who will also be distinguished guests at a special luncheon at the convention. (See additional story on page 23.)

AFA Starts Second Land Study

Hill Family Foundation underwrites \$25,000 land ownership

study in Minnesota to be directed by Dr. Samuel T. Dana

AS THIS issue goes to press, Fred E. Hornaday, executive vice president of the association, announced plans to inaugurate a second state land ownership study—in Minnesota. This study follows the successful conclusion of the California project and its purpose will be to clarify the status, responsibility and action as respects the efficient management and use of Minnesota lands for forestry purposes, including timber and forage production, recreation, water management, mining, and wildlife management.

Mr. Hornaday stated that the

Board of Directors of the LOUIS W. AND MAUD HILL FAMILY FOUNDATION meeting in St. Paul on March 17 authorized a grant of \$25,000 to The American Forestry Association for the purpose of financing this study.

As in California, the study will be under the direction of Dr. Samuel T. Dana, Dean Emeritus of the School of Natural Resources, University of Michigan. An assistant will be named later to work with Dr. Dana and an early announcement will also be made regarding the appointment of an advisory committee of Minne-

sota leaders to cooperate with the association in the conduct of this important public service.

The announcement by the Hill Family Foundation followed a preliminary on-the-ground survey made by Dr. Dana and Mr. Hornaday to determine the need for such a study. Endorsement for the proposed study came from state officials, business leaders and professional foresters. Governor Orville Freeman assured the association the project has his "enthusiastic endorsement."

The study will start immediately.



THE BLIGHT OF POLITICS

**Dr. Gabrielson was very fair in his
castigation of politics in conservation.
He blistered both political parties alike**

AT planning sessions for the North American Wildlife Conference last year, sponsors, including The American Forestry Association, pointed with concern to the fact that politics continues to creep into career conservation programs both at the state and federal levels. To help correct this evil sponsors recommended a free-swinging gloves-off session at this year's convention to call attention to the fact and Dr. Ira N. Gabrielson, president of the Wildlife Management Institute, was invited to do the job.

Dr. Gabrielson obliged. In an address entitled, "The Blight of Politics, or Conservation Be Damned!" delivered before a packed audience of over 1,000 at St. Louis, the speaker said Webster offers four modern definitions of "politics," an honorable word, that in its original meaning merely meant "the science of government."

However, Webster must have known something about conservation issues when he coined definition number four, Dr. Gabrielson said. "This speaks of politics in terms of political scheming, factional interests, and partisan rivalry. This is the politics that is bad for resources, and Webster's definition, in reverse order, makes a fair outline for a discussion of the wrong kind of politics in conservation administration today."

In scoring the use of jobs in conservation agencies to pay political debts as one of the "most pernicious aspects of the American form of government," Dr. Gabrielson then proceeded to tick off weak spots on the conservation scene today.

On the national level, the speaker said, "We have a prime example of what partisan politics can do to a

career organization in the U. S. Fish and Wildlife Service, which is only now recovering from its devastating bout with the spoils system." Here, career men were downgraded to meaningless jobs — including some who, ironically enough, were Republicans but who had never thought of their jobs in political terms. Morale sank to a low ebb. The result, the speaker continued, was a "chaotic four years of inaction, vacillation and generally unwise decisions."

The Administration, the speaker continued, has redeemed itself somewhat in the eyes of conservationists by "the forthright actions of Secretary Fred Seaton and Assistant Secretary Ross Leffler." Under their leadership, "the wreckage is being

salvaged and repaired, and the federal agency entrusted with the management and restoration of the nation's fish and wildlife services is getting back on the track and is moving forward."

"Model T's" in Swept Wing Age

It will not, however, regain its old status completely until the commissioner and his staff are included in the career service, the speaker stressed.

The speaker next turned his attention to the states. "Indiana is not the only state that operates almost completely through the spoils system, but it offers a good example of a state whose conservation adminis-

(Turn to page 69)

GOT A WATER PROBLEM?

GOT a problem in the small watershed field you would like to see aired at a national meeting? If so, here's your chance to get your problem clarified. In a letter to sponsors of the 5th National Watershed Congress, to be held September 29, 30 and October 1 at Dallas, Texas, General Chairman Waters S. Davis, Jr., has invited both sponsoring organizations and their members to submit lists of watershed topics they would like to see discussed at this Texas meeting. Your list should be in our hands at The American Forestry Association by April 20.

Mr. Davis' invitation is part of the general committee's plan to return to the successful format of the first and second congresses at the Dallas meeting. Special committees consisting of some members of sponsoring organizations and other experts will be appointed to draft reports on topics to be covered. These reports of around 10 minutes each will outline the problem and serve as a kickoff point for subsequent discussion from the floor.

In short, the 5th Watershed Congress is going to be a congress, not a convention, and the great bulk of the comment will be from the floor rather than the rostrum.

A special feature of this year's conference will be a tour of the widely-known Trinity Watershed.



Secretary of Interior Fred A. Seaton

SEATON ADDRESSES WILDLIFE CONFERENCE

SPEAKING at Stanford University in 1903, on the subject of natural resources, President Theodore Roosevelt exhorted the nation to leave "to future generations a heritage . . . unimpaired, and if possible even improved." That clarion call to conservation action continues to echo in our own days.

In the fifty-five intervening years, conservation practice — by private citizens, state agencies, and the federal government — has greatly increased.

Moreover, there is today unprecedented citizen interest in the management of this Nation's natural resources, particularly those under federal jurisdiction.

Only with such public interest — and understanding and action — can we hope for effective legislative and administrative results. Organizations such as yours have long realized that fact. To you and to them is rightfully due a major share of the credit for the progress made in the proper husbanding of our natural resources.

As Secretary of the Interior, I owe much to all of you. Many times your representatives have spent long hours with me discussing difficult and complex problems, benefitting me with information and counsel. Time and again members of local units of your organizations and the others have written or spoken to me their opinions and suggestions. Let me assure you here and now of my gratitude.

A multitude of major federal laws, old and new, today govern the use of publicly owned resources.

Many of them are complex. Sections of some of them appear to col-

lide with sections of others. Nevertheless, they do set the framework within which officials of the Executive Branch must act. And taken together, these varied pieces of legislation are inspiring evidence of a people's determination to deal as prudently and wisely as they can with the bounty nature has conferred upon them. On that, all of us can surely agree.

For public lands, we have major legislation dating from 1801.

For water, we have similar legislation dating from the Reclamation Act of 1902.

For minerals, we have the basic Mining Law of 1872 and its successors; for timber, the Forest Reservation Act of 1891 and subsequent enactments; and for grazing, the Taylor Grazing Act of 1934.

The development of our unparalleled national parks system has taken place under a variety of general laws since 1906. A major victory in this area was the launching in 1956, of the Eisenhower Administration's program to improve the national park system, widely known as "Mission 66."

Major legislation for fish and wildlife is, as you know, relatively recent. It includes the Migratory Bird Treaty Act of 1918, the Migratory Bird Conservation Act of 1929, the all-important 1934 "Duck-Stamp" Act, the 1934 Coordination Act with its 1946 amendments, the Pittman-Robertson Act of 1937, and the Dingell-Johnson Act of 1950. These measures came into being largely through the efforts of many of you, your predecessors, and your associates. Similar efforts received a long-due reward in 1956, when the Fish and Wildlife Act was passed by the Congress. Then we were able to create, in the Department of the Interior, the Office of Assistant Secretary for Fish and Wildlife. Through the cooperation of many people, in and out of the government, this historic step forward was taken.

Despite the progress made, I believe this Nation's natural resources program could still be better balanced. Administratively we are making every effort in our national planning to protect fish and wildlife, recreation, and associated values. Nevertheless, if these are to receive full protection, they must have appropriate additional recognition in federal law. Of that I am convinced. As Secretary of the Interior, I shall continue to do everything possible to further the enactment of such legislation.

Consider the real and justifiable need for it.

The demands on our recreational and wildlife resources are growing with incredible intensity. Cities, roadways, and industrial plants, for example, are devouring land at an annual rate of almost a million acres — an area larger than the state of Rhode Island.

Moreover, our country's population is growing at a fantastic rate; by 1968 it may reach two hundred million.

In the past few years the Nation has accomplished much to meet the challenges posed by such trends.

Since 1953, the government has added almost 50,000 acres to its federal wildlife refuges.

In the current fiscal year, the Department of the Interior is investing nearly \$57 million in sport fisheries and wildlife programs — almost 60 percent more than the corresponding amount for fiscal year 1953.

In the past two years alone the department has had nearly a five-fold increase in its investment in river basin studies. One of our immediate problems is the proposal to erect a dam at the Nez Perce site in Idaho, on the Snake River just below its confluence with the Salmon. Until there is conclusive evidence that such a structure would not do irreparable damage to the great anadromous fish runs up the Salmon

(Turn to page 64)



What other people say....

Small Woodlands Editorial Is Praised . . .

EDITOR:

I wish to congratulate you on the splendid editorial "Let's Get the Job Done" which appeared in the February issue of *AMERICAN FORESTS*. You have probably seen the *Congressional Record* for February 19, 1958, Page A 1555, in which I have an extension of remarks under the same title "Let's Get the Job Done" and in which I inserted your editorial in full for the benefit of Congress and all who see the *Congressional Record*.

I feel strongly about this. As stated in the *Record*, on January 24, 1949, I addressed the Congress with a speech on forestry entitled "Let Us Get the Forestry Job Done." At that time I referred to my speech printed in the *Record* on December 11, 1947, entitled "Starting the Forestry Job Now." In the earlier speech I pointed out how Russia was moving forward with a tremendous forest development program. We were just recovering from World War II with its terrific impacts upon our resources both human and material, including the forests.

Many times since these early speeches I have urged that we step up our forest development in the United States, for I believe that we are already engaged in a conflict with Russia on the economic front. I am also convinced that this struggle may last many years. The outcome may be decided by the strength of resources. Forest resources can be regrown—they are renewable and not like steel or oil which once used cannot be replenished.

To develop our forests, like every other undertaking such as the building of a

strong military force, requires men and money. When we plant trees we invest in new resources which will provide jobs, pay taxes and provide the paper, lumber, plywood, chemicals and thousands of products needed both in war and peace. Of course, we want and will get adequate money for munitions. But we must also provide money to develop our forest resources. Consequently, each year I have been appearing before the appropriation committees of the House of Representatives and urging full support for forestry items.

My analysis of the Forest Service appropriations for the past five years shows that for national forests, the Administration has requested total increases of \$25,441,650. During the same period, the Administration requested increases amounting to \$4,844,300 for research. I have no quarrel with this action. In fact, I am happy that the Congress saw fit to provide even larger increases for these purposes—\$28,895,000 for national forests and \$6,435,000 for research. However, you will probably be as surprised as I was to note that during the same period the Administration asked for a net *DECREASE* of \$1,650,527 in the state and private forestry items which provide for cooperative work with the state foresters in protection, tree planting and farm forestry. Fortunately, the Congress refused to accept these recommendations and not only restored the cuts proposed by the Administration, but actually increased the funds for this work by \$2,452,292.

Two things are significant about these figures: (a) they show that the Congress has been more liberal with money for forestry than has the Administration, and (b)

they show that the state and private forestry cooperative Programs have received much less consideration from the Administration than the other items. For their support, I commend the Congress and particularly my able colleagues, Michael Kirwan of Ohio, Chairman of the Subcommittee on Appropriations for Interior and Related Agencies, and the members of his committee, Norrell of Arkansas; Sieminski, New Jersey; Magnuson, Washington; Jensen, Iowa; Fenton, Pennsylvania; and Budge, Idaho.

The Administration's position with respect to the state and private forestry item is difficult to understand. The Timber Resource Review released recently after an exhaustive study by the Forest Service with the cooperation of the state foresters, forest industries and others emphasize what you brought out in your editorial in *AMERICAN FORESTS*—that the big problems and opportunities in forestry in this Nation are on the private forest holdings.

For the F.Y. 1959, the Administration is recommending another cut of \$1,500,000 in the cooperative tree planting items. Now again we must ask the Congress to override the Administration's position and restore the cut.

The action taken by The American Forestry Association in proposing "Let's Get the Job Done" is very timely. All conservation-minded citizens must join forces to develop the resources on the forest land of the Nation's 4½ million small ownerships.

Bob Sikes
U.S. Representative
Florida

Small Woodlands Editorial Is Criticized . . .

EDITOR:

Your allusion to the Coldstream Guards in connection with the U.S. Forest Service is very apt—both are organizations steeped in tradition, conceit, and obsolescence. Your plea to the government to lead the field of private forestry has the ring of a call for a blind man to lead the dog.

The federal government owns 70% of the timber land in Western United States, hires over 50% of the professional foresters, and still has the first step to take in anything but fire protection and semi-con-

trolled liquidation of the forests. Before we call on the Forest Service to spearhead the drive for good forest management it might perhaps, be a good idea for our "Coldstream Guards" to practice a little "close order drill" and learn their Manual of Arms on the lands under their stewardship. The 13 billion board feet of mortality mentioned in your editorial is, for the most part, left to rot because of the administrators' reluctance to overcome the inertia imposed by reams of rules, regulations,

and reprimands. If, after heavy pressure from local industries, a national forest deigns to start a small salvage program, the appraised price of the material (through manipulation of flexible mathematics) is so high that the material remains unsold. Are these the people that you would appoint to lead?

You speak truthfully of the need for leadership in woodland forestry. However, such leadership is not readily apparent in the
(Turn to page 70)

Washington



Lookout

By ALBERT G. HALL

PRESSURE FOR INCREASED ACTIVITY IN NATURAL RESOURCE DEVELOPMENT is rising as the Congress seeks to provide pump-priming employment to alleviate the slowly-worsening recession. First off, both the Administration and the Congress are dusting off plans and developing new ones in the public works programs. The White House has been keeping somewhat current studies of rivers, harbors and navigation projects, multiple-purpose water developments, and small water developments. The Congress, lead by Senator Lyndon Johnson, and backed by minority members as well as the majority group, have condoned the stepping up of action on civil works projects for which funds have already been appropriated. There is a reported \$7 billion in unexpended balances in funds already appropriated for this and previous years for civil public works and military construction, around \$4 billion of which is applicable to the civil end. Thus existing public works programs can be expanded on short order through allowing these balances, which have been held for budgetary and other reasons, to be spent, especially in areas of serious unemployment.

THE OMNIBUS RIVERS AND HARBORS AND FLOOD CONTROL BILL which authorizes new projects for future appropriation passed the Senate in the first session of this Congress. The House has now acted upon it, with amendments, adding a number of projects which were not in the Senate-passed measure, and retaining, despite efforts to delete them, a series of projects which the Corps of Engineers and the Bureau of the Budget had not yet approved. A similar measure was vetoed by the President during the previous Congress because of the number of un-scrutinized projects in it. In some quarters, a Presidential veto has been predicted for the present bill. An attempt was made in the House to provide the President with an item-veto power in relation to this bill, so he could eliminate individual, questionable projects without delaying the commencement of more worthy projects. This power was not granted.

INCREASED FUNDS FOR WATERSHED PROTECTION AND FLOOD PREVENTION activities under the Soil Conservation Service have been requested by the Administration for the next fiscal year, beginning July 1, 1958. In an amendment to the budget, the President has asked for a total of \$24,000,000 for watershed protection, and \$18,000,000 for flood prevention activities of the S.C.S. These are increases over the original budget of \$10,000,000 and \$4,780,000, respectively, for the two related activities. In asking for the increases, the Administration indicates that the watershed protection money will be used to increase from 60 to approximately 100 the number of projects on which construction of works of improvement will commence in Fiscal Year 1959, in addition to acceleration of some going projects. The increased flood control money will be used, if appropriated, to accelerate 11 projects on which work has already begun. In addition to the S.C.S. project fund increase, the President has also amended the budget to provide \$70,823,000 for various projects under the Bureau of Reclamation.

BACKLOG OF NEEDED CONSERVATION WORK IS BEING STUDIED BY SENATOR HUBERT HUMPHREY of Minnesota, who has asked the federal agencies concerned for estimates of conservation program needs in forests, parks, and other public and private lands, including fish and game conservation. The Minnesota Senator has also announced that he is revising his Youth Conservation Corps Bill which he introduced last year. The original bill called for a study of the feasibility and applicability of a youth corps, patterned in part around the Civilian Conservation Corps of the early New Deal days.

(Turn to next page)

THE FIRST MAJOR LAND-USE ACT OF THE 85TH CONGRESS became law on February 28 when the President signed Public Law 85-337, providing that "withdrawals, reservations, or restrictions of more than 5,000 acres of the public lands of the United States for certain (military) purposes shall not become effective until approved by act of Congress." While the law exempts from the Congressional action some areas which had been reserved temporarily, the passage of the act should be hailed by its supporters as a victory. It also provides for multiple-use management of such lands as may be reserved, to the extent that multiple-use is consistent with the military purpose for which the land is withdrawn.

THE 1958 FOREST FIRE SEASON ran into considerably more expense on federal lands than the appropriations allowed. As a consequence, both House and Senate have approved additional funds for the current fiscal year: \$700,000 for the Bureau of Land Management to be transferred from budgetary reserves, and \$3,850,000 in new appropriations for the Forest Service. While the Department of the Interior as a whole had a light fire year in the continental United States, it had a real blow-up in Alaska. Total burned area of forest and range for all the agencies of the Department of the Interior was 5,220,070 acres. The Alaskan fires, 403 of them, totaled up 4,839,281 acres.

ADDITIONAL AUTHORIZATIONS FOR NATIONAL FOREST ROADS AND TRAILS have been approved by the House, in the federal-aid highway bill for the years 1960 and 1961. The original bill called for \$27,000,000 for forest roads and trails in each of the two years. The House added \$1,500,000 to bring the total authorization to \$28,500,000. The bill also includes authorizations of \$30,000,000 annually for forest highways (national highways passing through national forests); \$16,000,000 annually for roads in the National Park System; \$16,000,000 for parkways; \$12,000,000 for roads on Indian reservations; and \$2,000,000 for roads and highways on public lands. These are just authorizations, for which appropriations may be made in the two years covered by the bill.

TWO WILDLIFE BILLS OF SIGNIFICANCE HAVE BEEN REPORTED BY THE HOUSE Committee on Merchant Marine and Fisheries. One would authorize the Secretary of the Interior to purchase or lease wet-land areas and pot holes for the protection and production of migratory waterfowl. The other would require that 65 percent of the revenues from duck stamp sales be available for location and acquisition of migratory bird refuges, that not more than 15 percent be used for administration, law enforcement, and cost of printing and distributing stamps, and that the remainder be used for development and maintenance of the refuges. In reporting the measure the committee stated that during the past five years, "out of over \$22.5 million duck stamp collections, but a little over \$3 million have been used for the purpose of acquisition." The committee also suggested the desirability of the Department of the Interior asking for greater appropriations for refuge development. "It is the view of the committee that, to the extent that the research and refuge development programs cannot be supported out of 20 per cent of duck stamp money authorized for those purposes under this bill, they should be handled under an appropriation in accordance with the original concept of the duck stamp fund use."

RECREATION RESOURCES REVIEW TOOK ANOTHER STEP TOWARD ENACTMENT, as the House Committee on Interior and Insular Affairs reported the bill with amendments. The bill, S. 846, which passed the Senate in January of last year, would establish a National Outdoor Recreation Resources Review Commission to direct a study of recreational resources and the needs for such, looking ahead to the years 1976 and 2000. The House committee amendment defines what is meant by "other lands" than public lands, in this manner: "Outdoor recreation resources shall mean the land and water areas and associated resources of such areas in the United States, its territories and possessions which provide or may in the future provide opportunities for outdoor recreation, irrespective of ownership." Other committee amendments provide for representation of livestock, mining, petroleum interests and state travel commissions among the 25 non-federal members of the Commission's National Advisory Council, and extend the period of the basic study to September 1, 1961; the Senate-passed measure sets December 31, 1959, as the date of the study report.

Editorial — THE LAST FRONTIER

When the United States in 1867 purchased Alaska from the Russians for \$7,200,000 in gold it struck what is unquestionably one of the greatest land bargains of all time. Alaska is a truly fabulous country. It is more than twice the size of Texas. From the tip of its southern "pan-handle" to the end of its Aleutian chain of islands to the northwest, the distance is equal to that from Washington, D. C., to San Francisco. All told, its area totals 586,400 square miles. Its highest point is Mt. McKinley, 20,300 feet, the loftiest peak in North America.

Contrary to the views held by many Americans, its climate along a seaboard indented by deep fjords is on the mild side, not unlike Washington and Oregon. Due to the temporary effect of the return Japan current, it rarely goes below zero and the mean annual temperature is between 54 and 60 degrees Fahrenheit. Rainfall here and up the slopes of Pacific mountain range is heavy—80 to 110 inches a year. On the other side of this range that parallels the coast is a great plateau and then another range of mountains—the Rockies. Beyond that is another great plains region that slopes gently to the Arctic Sea; and here the summers are short and the winters severe. Most of the interior is a land of low precipitation, about 15 inches a year. There the growth of forests and other vegetation depends largely on stored up moisture in the permanently-frozen subsoil—permafrost—which is released during the warm growing season.

Alaska is rich in resources. It is the seat of the salmon industry. Its minerals include gold, silver, copper, gypsum, sulphur and coal lands of great extent. Oil has been found in quantity and some experts believe deposits there may equal those of the Middle East. Southeastern Alaska alone has 21 million acres of timber, mainly conifers, with Sitka spruce predominating. In addition there is a quantity of hemlock, birch, poplar, cottonwood, alder, willow and yellow cedar. The interior has enormous areas of lighter stands of white spruce, birch, cottonwood and aspen. There is wildlife in abundance and Alaska is the nesting ground for many varieties of wildfowl. The recreational potential is unlimited. Many people believe that Alaskan scenic resources—especially in the lovely Lake Louise area—surpass anything in North America.

How is our stewardship of this vast, rich land progressing in terms of conservation and especially in reference to fire? The answer is that we have been so derelict in meeting our responsibilities that the situation is a disgrace to the United States. As Chief Forester Kenneth B. Pomeroy told a Senate subcommittee last month, "The appalling devastation is just plain shocking."

The last two years up there have been terrors

in reference to fire. Lightning caused? Yes, most of the big ones, but today it is the influx of careless people that is really tipping the scales. In 1956, fire burned 631,375 acres. In 1957, this loss jumped to 5,220,070 acres. Timber, wildlife habitat, soil and recreational potential are being depleted. One village was wiped out last year. Two doctors at the National Wildlife Federation meeting at St. Louis said smoke grounded them repeatedly at Anchorage, making it impossible for them to fly in and out to see patients. Caribou range has been destroyed for as much as 50 or more years to come. Nesting wildlife in the path of fire perished in great numbers.

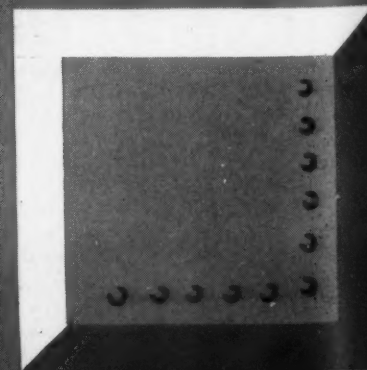
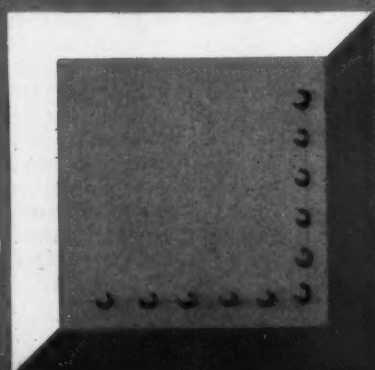
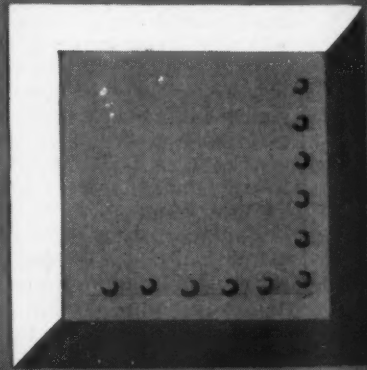
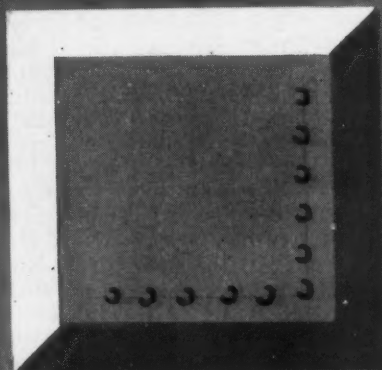
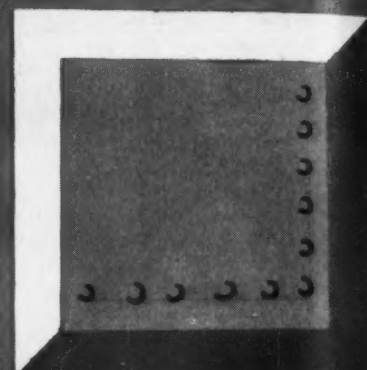
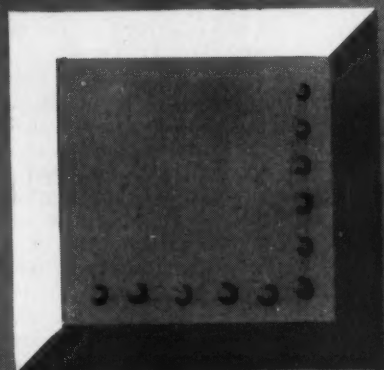
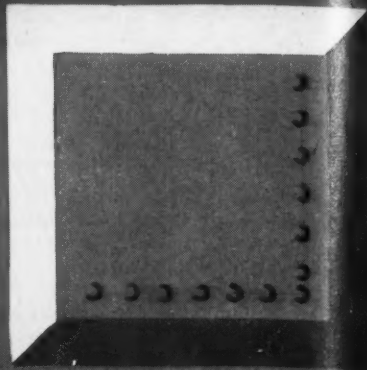
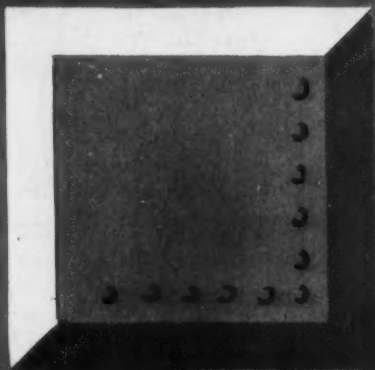
What's needed? Right now, expenditures to control fire are running less than one-fourth cent per acre per annum. At least one cent per acre is required. This would compare with 10 to 20 cents per acre spent to control fire in U. S. forested regions. This increase would enable the hardworking Bureau of Land Management, which has already done a herculean job against overwhelming odds, to at least make a start in getting fires on roughly 225 million acres under their jurisdiction under control. The bureau desperately needs more bases from which to launch control measures. It desperately needs an air arm including smokejumpers (which the Forest Service has agreed to train at \$300 a head if BLM can get the money) and helicopters. And finally it desperately needs more and better equipment of all types to put an end to the scrounging that is now going on to get a half-track here and an airplane there in an effort to get the job done. Arthur Greeley, former regional forester in Alaska, told us at St. Louis that BLM may have to set up a zoning system of priorities but added, "Whatever you do, give those BLM smoke eaters in Alaska all the credit in the world. They've been truly magnificent." Former Gov. B. Frank Heintzleman concurred.

Finally, any effort to Keep Alaska Green must take an educational program to a population that is largely indifferent to those annual fires. In the coastal regions, national forests have help from heavy rainfall and new industries that know how to hit fires hard. This is not true in the interior. To get at this effectively, a public hearing in Alaska by the appropriate Senate committee would be an admirable first step. That would focus attention on the job that needs doing both in Alaska and here at home. One cheering development is the interest that has already been expressed by members of the Senate.

Alaska is America's last great frontier. We got it for a song from a nation that today is making rapid progress in forestry endeavor. For many reasons we should do what needs doing up there; and we should get at it without delay. (JBC)



Gold crosses top the cupolas of St. Basil's Cathedral on edge of Red Square in Moscow



Russians were testing everything—equipment, work techniques—to increase output per man-hour (much lower than ours)

Most logging was “full tree” type—the entire tree is transported to electrified lower landing for trimming and cutting



OVER THE IRON CURTAIN AND INTO THE WOODS

By SETH JACKSON as told to CLIFF OWSLEY



Seth Jackson

WHAT impressed me most about Russian forestry? Extensive use of research to solve timber problems, professional competence of key men and women, and worker training programs, including safety. A 20-day tour in the Soviet Union, during which I talked with the minister of the timber industry, heads of research institutes, researchers, woods workers, and plain citizens, con-

vinced me that forestry there is on the move.

Many other impressions of this strange land of contrasts were surprising, but usually pleasant. I learned much, met many friendly people, and certainly enjoyed the trip, though I was on the go nearly all the time and had work to do.

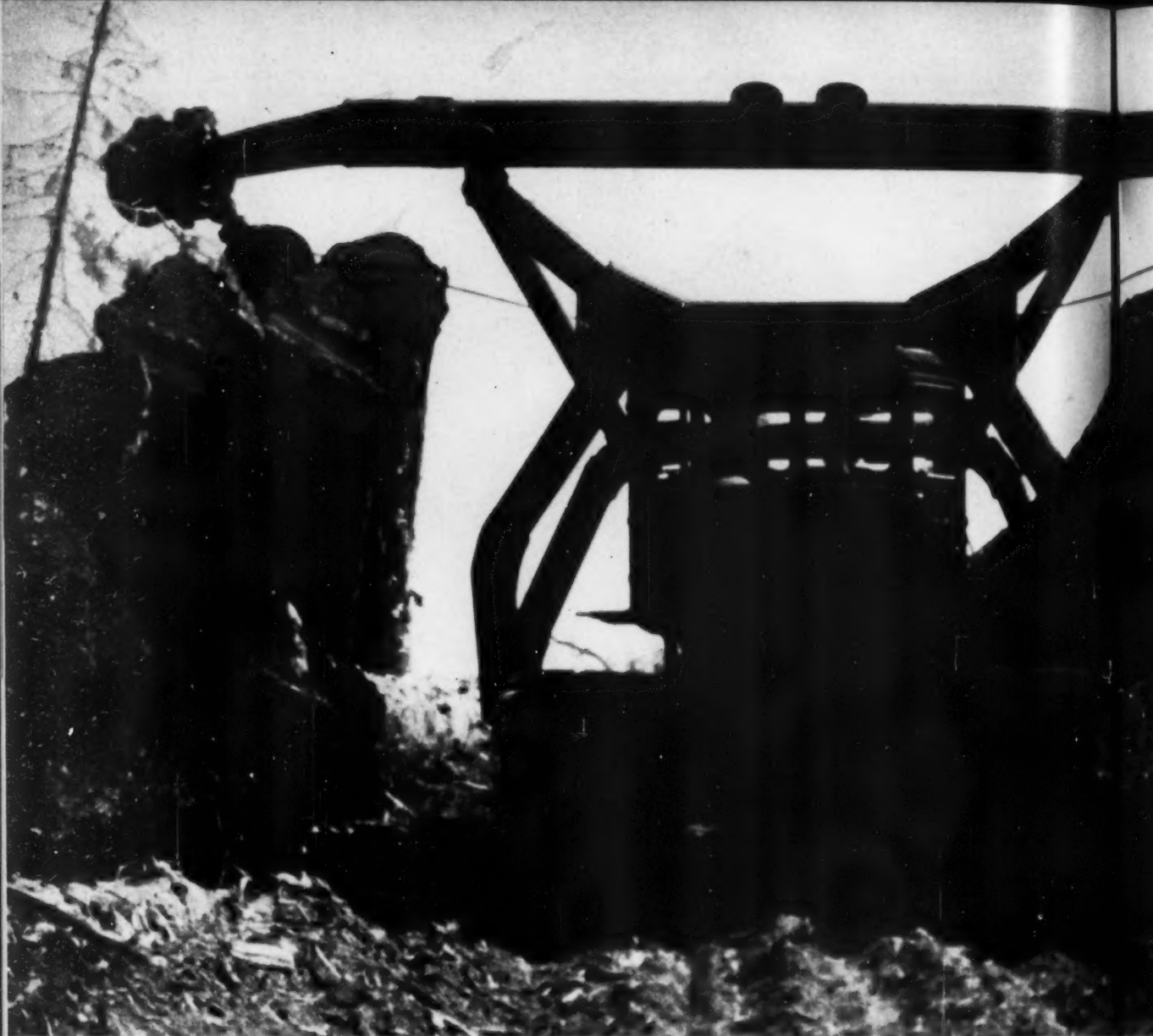
Another major impression was their preoccupation with the theme of peace. We met it everywhere. While much of it may be planned propaganda, I have no doubt of the sincerity of the average Russian's friendliness and desire for peace.

You may be wondering why the Safety Officer of the Washington Office of the U. S. Forest Service was in Russia. I was a member of a three-man U. S. delegation to the second session of the Joint FAO/ECE (Economic Commission for Europe) Committee on Forest Worker Techniques and Training. The tour consisted of a conference in Moscow and a visit through a logging area between there and Leningrad last September 9-26.

Head of the delegation was Mark Townsend of the Townsend Lumber Company, Stuttgart, Arkansas; the other member was Max Pinkerton of the North Memphis Lumber Company, Memphis, Tennessee. Sixty-seven other delegates from 25 countries attended.

My part in all this began earlier in the year when the Forestry Mission of FAO (Foreign Agriculture Organization), in Geneva, Switzerland, asked me to prepare a paper on vocational training and accident reporting. This was for world-wide use in forestry and forest industries. I prepared the report, and later was selected to attend the Moscow meeting where I presented a paper on the same subject.

I am no authority on Russia, its forestry, or its safety program. After all, I was there only 20 days. I report what I saw, what I was told, some of the things I observed, and the impressions these made on me. I doubt that we could be considered typical travelers there, since the whole delegation was given the red-carpet treat-



Noted during the observation tour was this ominous looking piece of equipment, a two-arm skidding arch tractor weighing 50 tons.

ment, and we Americans particularly were singled out for special courtesies.

The Big Picture

As a framework for these remarks, let's note a few facts about the overall picture of Russian forestry. The U.S.S.R. covers an area of about 8,600,000 square miles. From east to west is more than 5,590 miles—twice the distance from the east to the west coast of the United States. Their north-south boundaries are 2,800 miles apart—almost two thousand miles farther than from Chicago to New Orleans. That vast country is

roughly three times as big as ours, and the population density is only about 23 persons per square mile compared to our 56.

Forests cover almost a third of the area. Timber volume in their forests is three times that of commercial forest land in continental United States. However, 74 percent of their forests are in Siberia. Most of their timber exploitation has been in European Russia, where 81 percent of the people live. Consequently the western forests have been severely depleted, and the trend now is to move timber operations eastward to Siberia.

About four-fifths of the timber is coniferous, mainly larch, pine, spruce, and fir in the north. Hardwoods are birch, aspen, oak, beech, and maple.

Our conference and woods tour dealt with harvesting timber rather than with forestry in general. The first week was taken up with meetings in Moscow. This was followed by a 10-day study tour which included visits in Moscow to the Scientific Institute for Mechanical and Power Research; in Leningrad, to the Central Research Institute for Timber Floating, the Research Institute for the Design of Forest



Czar-Bell weighing 200 tons was cast in 1735. It fell 2 years later and 11 tons broke off

An electrified logging landing where trees are delimbed and sorted by size on conveyors



Right, gasoline power saw with handling frame so man can operate it from an upright position. Left, woods worker demonstrates the saw



Transport, the Kirov Timber Technical Academy and the Institute for Advanced Training; and two timber production units in the forests between Moscow and Leningrad.

My First Russian

My introduction to Russia came late at night in the airplane high over the Gulf of Finland between Helsinki and Moscow. A young man in a dark, double-breasted suit sat next to me. The Russian stewardess, a tall girl in a turtle-neck sweater and ponytail, brought him a sandwich and a large glass of vodka. He downed it in one large gulp, then told the girl to bring me vodka also. When mine arrived I was afraid of the consequences of the bottoms-up procedure on an empty stomach, so I poured half of it into his glass. That started a two-hour conversation in English-French-German-Russian and sign-language.

My partner was Nicholai Portugalow, a German-Russian interpreter, 32 years old, returning from a meeting in Budapest. He was married and had a 7-year-old daughter. This was one of many conversations I had with Soviet citizens, all just as friendly as Nicholai. Soon we were circling the immense city of Moscow, spread out below us in the midnight moonlight.

The landing was a scene I won't soon forget. Moscow is vast and rambling, electric lights in all directions. Part of it is lit by an atomic power plant, of which the Russians are rightfully proud. Dozens of large planes were parked off the taxi ramps. The terminal was crowded, even at midnight. In construction it reminded me of our railroad stations built at the turn of the century. In many respects, the Soviets are living in the world of 1900, compared to American standards. We saw this in the decor of their hotels, the appearance of people on the streets, in

homes, schools, recreation halls, in their lumbering villages, and in the dim light of public buildings.

There was a mix-up at the airport; no one met me, or so I thought. After waiting about 15 minutes I noticed several Russians scurrying around as if they had lost something. They had! Me. I shoved my passport into their faces and they finally recognized me.

Antonovich Shotski was in the group. We soon became fast friends. We were together for about three weeks, and many times afterward I teased him about his "close call" to the salt mines for missing me at the airport. I heard that he got a reprimand from his boss for not being "on the ball." I was told, though, that slave labor camps in Siberia are closing down. As evidence they mentioned a steady stream of prisoners traveling through Moscow since Stalin's death.

The 20-mile drive to the Sovetskaya Hotel made a vivid impression on me. The streets are many cars wide and lined with mile upon mile of immense apartment houses. It looks like a city on the move, with tremendous forces at work to improve the lot of citizens. An influx of the population to cities in recent years brought overcrowding, but this is being relieved. Wherever I looked on the 1 a.m. drive that first night I saw huge cranes, each being used in building an apartment house a city block square, 10 to 12 stories high.

Slums are disappearing, I was told, as apartment houses are completed at the rate of one a day. I learned later that huge sections of Moscow are being rebuilt. Though many families still live in one room, they are working toward eliminating all slums by 1960. Streets and highways are well labelled, as they are in Switzerland, with pictorial safety signs containing no words. Thus, a school zone will be marked with a

poster of a child, a railroad crossing by a locomotive silhouette.

Shotski is in charge of foreign relations in the Ministry of the Timber Industry. He is a big, "rough and ready" sort of man, the life-of-the-party, and was assigned to keep our group of 70 from many nations on schedule and happy regardless of language, weather, or other difficulties. Everything went right on schedule all day long and far into each night, quite an accomplishment in itself.

At the Conference

The conference opened in a high-ceilinged, marble-pillared room in the Sovetskaya Hotel where we were staying. Vice minister of the Timber Industry G. M. Orlov set the keynote:

"We strive for more production through mechanization and better work conditions," he said. "We shall be happy to show you what we have done. In the woods we are about 80 percent mechanized now. We want you to know about our plans. We should be very grateful for all criti-

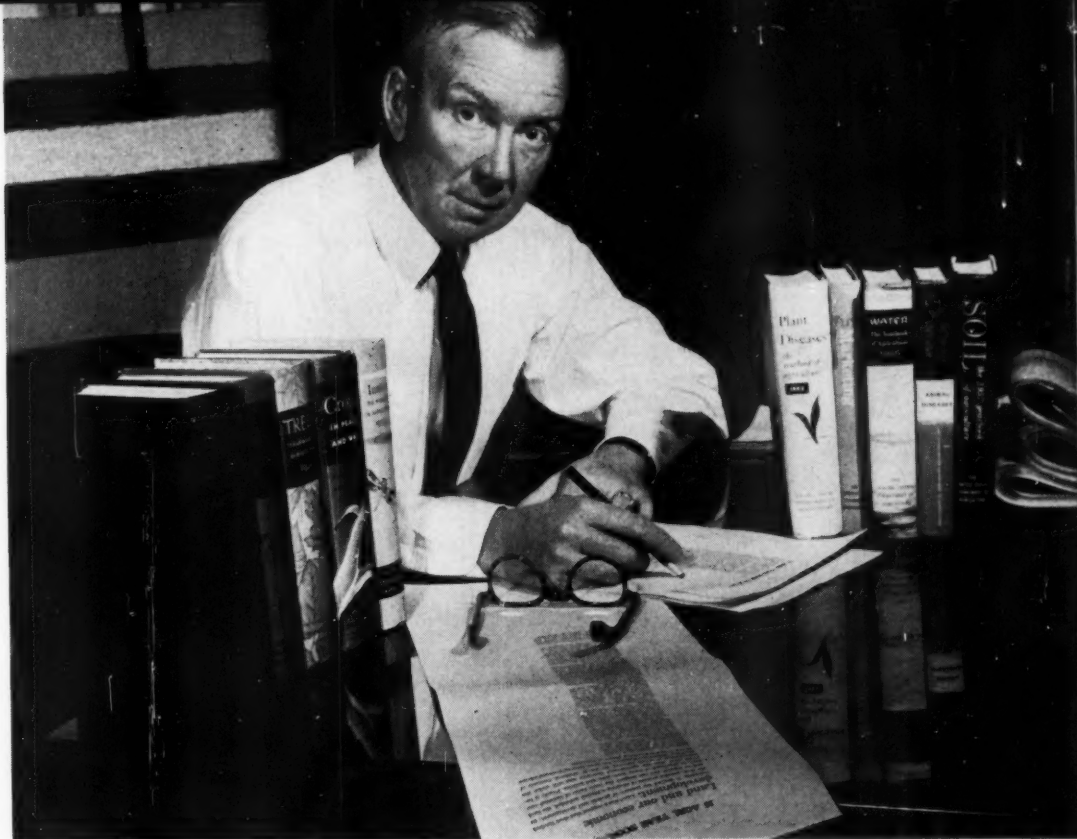
(Turn to page 46)



Planting-seeding scarifiers exhibited at the Agricultural and Industrial Fair in Moscow bore resemblance to Sputnik



U. S. delegation: Seth Jackson, second from left, Mark Townsend, third from left, and Max Pinkerton, extreme right



Photograph by Vince Finnigan

Monuments to Alfred Stefferud are the *Yearbooks of Agriculture* which he has edited since 1945

WORLD OF WORDS

By WILL BARKER

ONE of the world's best buys in books is edited by a quiet-spoken man who gets out of bed five mornings a week at five o'clock in order to be on time for his job.

The book-buy is *The Yearbook of Agriculture*, an annual that has been issued almost without interruption by the United States Department of Agriculture for more than one hundred years. The man is Alfred Stefferud, a former correspondent here and abroad for the Associated Press and since 1945 the editor of the yearbook.

The reason Stefferud rises at cock-crow is that he believes in living where a man has air around him. His home is in Virginia's Loudoun County. More than two hundred years old, the house is of stone construction and a part of it was built by Hessian soldiers. As his three children are of college age or a little older, he and his school-teaching wife live by themselves for the greater part of the year. Between home

and office there is a forty-mile drive to be made in time for the working day to start at seven o'clock.

The office is a cubicle on the fifth floor of the Department of Agriculture in downtown Washington. A sprawling granite pile, easier to get lost in than the most intricate maze, the building known to most Washingtonians as "Agriculture" fronts on the Mall. This long tree-shaded stretch of grass extends from the domed Capitol to the monolithic shaft of the Washington Monument.

Stefferud is a blue-eyed man of medium stature, who wears tweeds, white broadcloth shirts, and dark neckties. He works in shirt-sleeves but does not turn back the cuffs. Dark-rimmed reading glasses are necessary as he sits hunched over one of the most uncluttered editorial desks I ever saw. Through the window behind him and beyond a nearby writhing television antenna, you can see the top fourth of the Washington Monument.

Among the many shelved books in the office is the first *Yearbook of Agriculture*. It was published in 1849 as Part II (Agriculture) of the annual report of the Commissioner of Patents. In the Foreword, Daniel Lee, known as "the practical and scientific agriculturist," wrote:

"The continued fruitfulness of the earth is an interest far greater and more enduring than any form of government."

That first yearbook is a slim-jim sort of job in comparison to those currently edited by Stefferud with some help from two assistants. Today a yearbook usually rivals the combined lengths of all the tales spun by Scheherazade in *One Thousand And One Nights*.

Some, such as *Plant Diseases*, 1953, are by actual count six hundred thousand words. Others, such as *Marketing*, issued during President Eisenhower's first term, are not so long.

Whether a yearbook is long or (Turn to page 58)



Former chief of the Forest Service Lyle Watts (left) with Sen. Neuberger

IN Oregon, where I was born and raised, two ideas have motivated much of my career. One has been a basic belief in the wise use and conservation of natural resources, as contrasted with their wasteful exploitation. The other has been a firm conviction that we have much to atone for in our shabby treatment of the American Indian, during the era when the West was being settled.

Both these propositions are heavily involved in the critical situation confronting the Klamath Indian Reservation in southeastern Oregon. They emphasize the fundamental purposes of my bill, S. 2047, which seeks to prevent the ponderosa pine timber and waterfowl marsh of this reservation from being made pawns in a bargain-basement sale that would occur under conditions highly adverse to the preservation of such resources.

And S. 2047 also has as its goal the assuring of a fair and generous price for the 2,133 enrolled members of the Klamath Tribe, to whom these resources belong as their rightful heritage.

My bill provides for federal purchase of the Klamath Indian Reservation. The great pine forest would be placed under the supervision of the United States Forest Service, and thus added to the contiguous Rogue River, Fremont and Deschutes National Forests. The vast marsh, often used by some 80 percent of the birds traveling the Pacific Flyway, would be made part of the refuge system of the Fish and Wildlife Service. The Indians would receive for these valuable assets a price based on a professional appraisal, but finally determined by negotiation.

This controversy has festered and simmered in our state for many years. Yet I pride myself on the fact that S. 2047 has attained more unified support than any comparable proposal, entailing similar debate, in Oregon in modern times. The bill for federal purchase of the Klamath Reservation has enjoyed the backing of the Klamath Indian Tribal Council, of the Management Specialists appointed by the Interior Department to exercise custody over termination proceedings, of Chambers of

By **RICHARD L. NEUBERGER**
United States Senator

Solving the St

Commerce and trade unions, of a major segment of the daily and weekly press, of the Oregon Legislative Interim Committee on Indian Affairs, of Governor Robert D. Holmes, of leading conservation groups such as the Izaak Walton League of America and the Wildlife Management Institute, of women's clubs and farm organizations. Scarcely an echelon of social or economic life in our state has failed to endorse the bill.

Symbolic of this unified support is the manner in which the Legislative Interim Committee spoke through two members in favor of S. 2047 at Congressional hearings in February; there were State Senator Leander Quiring, a prominent Republican who is the committee chairman, and his fellow committee member, David C. Epps, who is state chairman of the Democratic Party.

In view of such widespread bipartisan backing in our state for my federal purchase bill, I continue to be puzzled as to why Secretary of the Interior Seaton—at the 11th hour—complicated the situation by reporting unfavorably on S. 2047 and then bringing forward his own alternative proposal for private purchase of the Klamath timber in 11 huge blocks. Federal acquisition would follow if private purchase failed to materialize. Inexplicably, the Seaton measure was drafted without consulting the Management Specialists, who had endorsed S. 2047 and who had become experienced in handling Klamath problems at the grassroots for nearly four years. In addition, they are the Interior Department's own representatives in this task!

I shall not go into further detail about the Seaton bill, because the Secretary, himself, described it at length in the February issue of *American Forests*. To be completely fair, I myself, introduced Mr. Seaton's proposal "by request," so that it could soon come before the Senate Subcommittee on Indian Affairs, of which I am the chairman. This bill is now known formally as S. 3051. I regard it as far less de-

KLAMATH DILEMMA

sirable than outright and direct federal purchase, as called for in my measure. Yet, I am not going to be arbitrary or politically partisan about a matter as crucial to my native state as this. That is why I moved speedily to sponsor the Secretary's bill "by request." I am candid in confessing that the Seaton bill, in my estimation, is much to be preferred over any course which would let the present termination take full effect.

To me, the unwise and ill-conceived Klamath termination act which was passed by Congress in 1954 can only be described by the unique phrase which the illustrious Winston Churchill once applied to the Soviet Union—"a riddle wrapped in a mystery, inside an enigma."

Hearings originally were held in Oregon on a bill for slow, orderly and judicious abandonment of federal supervision over the affairs and assets of the Klamath Tribe. Then, on the eve of the bill's passage, a clause was inserted allowing any registered member of the tribe to elect to withdraw and to collect his pro-rated share of the assets. This meant overnight dismemberment of the reservation, should any substantial proportion of the Indians decide to withdraw. Furthermore, the bill was "sweetened" to include a *per capita* payment of \$250 out of tribal funds for each Klamath member. Attorneys for the tribe have testified that this did much to neutralize Indian opposition to a measure which many of them instinctively mistrusted. Why was the *per capita* payment included? Who put it there? For what real purpose?

Indeed, the 1954 termination bill was so swiftly and surreptitiously overhauled on the threshold of its enactment that many of its earlier backers failed to recognize it. Here is what my Indian Affairs Subcommittee was told last October by William Ganong, Jr., representing the Klamath County Chamber of Commerce:

"The Congress substituted for section 5 of Senate Bill 2745, the



Forests on Klamath Reservation contain four billion feet of prime ponderosa pine

present section 5 of Public Law 587, which eliminated the period of further study and planning, and substituted a crash program for the sale of tribal assets. This was done without the knowledge of the people of Klamath County. In fact, the Klamath County Chamber of Commerce was unaware that this amendment had been made until after the bill had been enacted and signed by the president. There was absolutely no advance warning ever given the people of this county that Congress intended to make this change and radically depart from the bill upon which hearings had been held in this county."

Nor could ignorance of conditions in Oregon be pleaded for those in custody of the measure. The Chairman of the Senate Committee on Interior and Insular Affairs at the time was Guy Cordon, veteran senator from Oregon. Representative Sam Coon of the 2nd Oregon Congressional district, where the Klamath Reservation is located, was in charge

of the bill in the House. Ex-Governor Douglas McKay of Oregon was serving as Secretary of the Interior and thus advising President Eisenhower as to whether or not the bill should be signed at the White House.

Despite this impressive *dramatis personae* from Oregon at the front of the stage, the unfortunate measure became Public Law 587—notwithstanding its peril to Oregon's economy by threatening to drop nearly 4,000,000,000 feet of prime ponderosa pine timber on the market, particularly at a time when Oregon lumber already is enduring a grim economic crisis.

And now it is my task to try to pick up the pieces. . . .

In 1957 we managed to get a bill through the Senate delaying the final termination date until 1961 and providing \$1,000,000 in federal funds to reimburse the Klamath Tribe for the costs of this process. Unfortunately, the House sliced the reimbursement to \$550,000 and set August 13, 1960, as the closing termination date. This means that sale of the Klamath forest, marsh and other outdoor treasures must commence

under the auctioneer's gavel in August of this year, unless we can pass intervening legislation of a corrective nature by the end of the present 85th Congress. The sands of the Klamath hourglass are running out. We have only until midsummer to forestall actual operation of the 1954 termination act, which the *Oregonian* of Portland has described as "premature and unrealistic."

I have emphasized some of the difficulties. There are many assets, too. In the beginning, I was prejudiced against the Management Specialists chosen by Secretary McKay's unsuccessive liquidation of the tribe's holdings. After one of the three specialists had withdrawn under political fire to handle Mr. McKay's unsuccessful campaign for the Senate in 1956, it became my responsibility to work as closely as possible with the two remaining members of the team—Thomas B. Watters of Klamath Falls, and Eugene Favell of Lakeview. They are Republicans. I am a Democrat. Yet I pride myself upon believing that we have cooperated harmoniously and effectively. Mr. Watters is a man of dedicated responsibility. Mr. Favell has sacrificed his health in this cause. Together, they have made a further contribution by employing a forester of long and varied experience in the great Klamath tribal forest, Earle Wilcox. I doubt if any three other citizens could have handled a touchy and vexing task as competently as have the Messrs. Watters, Favell and Wilcox. Without their herculean efforts, I fear the Klamath situation might be in chaos already.

The Klamath Indians, themselves, have been remarkably patient throughout this entire episode. They have understood the importance of continuing sustained-yield manage-

ment of the timber and thus stabilizing the economy of the Klamath Basin. They have taken such an attitude, despite the fact that it may delay settlement of a vast tribal estate which could mean as much as \$55,000 per member when the prorated shares are finally distributed. I wonder how many non-Indian citizens would have done as much, were it predominantly an Indian community which had its future at stake?

Because of this splendid cooperation from the Klamath Tribe and its executive committee, I feel particularly conscious of our obligation to pay a fair and even generous price for the resources of the reservation. My bill promises to do this with greater assurance than does the Seaton bill. Let me explain why.

S. 2047 provides for the purchase by the Secretary of the Interior of all Klamath tribal lands at their fair market value. A three-man appraisal board—one member of which shall be elected by the Klamath Indians—is established to determine the value of the reservation based on the comprehensive appraisal recently completed by an agent of the management specialists. The board would, among other things, take into consideration the value of tribal minerals, and loss of hunting and fishing privileges, for which no appraisal has been made. After a thorough examination of all available data, the board would submit its report to the Interior Committees of each branch of Congress. Unless Congress provided otherwise, the board's recommendation would become effective 60 days after its submission. Secretary Seaton's bill, on the other hand, establishes a so-called "realization value" as the fair market value of tribal timber units. This value is based on the assumption that 70% of the Kla-

maths will elect to have their shares of the tribal property liquidated, and that the timber must be sold within a two-year period, on a competitive market, with no timber cutting restrictions.

This proposal departs from the traditional definition of a willing buyer and a willing seller not under compulsion, and would compel the Indians to accept a price based on a forced sale concept. The Klamaths have already indicated their dissatisfaction with Secretary Seaton's formula, because it does not provide just compensation for their property.

There is no substitute for justice or equity in dealing with Indians or with anybody else, for that matter. Our national record in giving the American Indian his fair share is not a happy one. I once spent nearly a whole night listening to Colonel Charles Erskine Scott Wood, then the oldest living graduate of West Point, describe his shame and mortification over how our troops fired with Gatling guns into tepees where Nez Perce Indian children and squaws were concentrated. In a recent book, *Whoop-Up Country* (University of Minnesota Press, \$5.00), Professor Paul F. Sharp of the University of Wisconsin has compared the success of the Northwest Mounted Police in dealing with the Indians on the old frontier, as contrasted with our own failures.

"From the moment of their arrival in the West," Professor Sharp writes, "the Mounted Police regarded their mission to the Indians as paramount. . . . Their simplest decision, though it was also their most important, was to treat the Indians with honesty and respect. The tragic record of deceit and broken faith provoked by the forked tongues of the Long Knives had cost the American government millions of dollars and thousands of lives. . . . American experience served as guide and warning to Canadian officials. It convinced them that no policy could succeed, unless it was based on consistency and integrity."

This legacy from out of the pioneer past should demonstrate how to treat the Klamaths in the crisis upon us today.

Nor can I complete this discussion without paying tribute to the responsible attitude taken by the bulk of the press in Oregon. This is a complex and involved issue. It lacks glamor; even its geographic location is remote from the metropolitan cen-

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Senator Neuberger with Oregon State Legislature's Interim Committee on Indian Affairs. Seated, from left, Sen. Neuberger and Leander Quiring; standing, from left, Samuel Wilderman, David C. Epps, LeRoy Geinger, and John Kerbow





Mt. Lemmon high in Santa Catalina Mts.

FOREST Service Chief Richard E. McArdle has accepted an invitation from The American Forestry Association to keynote its 83rd Annual Meeting October 27-30 at Tucson, Arizona. Theme of the meeting will be "Water, Forests and People."

In a new and original approach, this year's keynote address will be presented atop Mt. Lemmon in the Coronado National Forest. Delegates to the convention will be transported by bus up Mt. Lemmon in the Santa Catalina Mountains for an on-

McArdle Named Keynoter

Forest Service Chief to give modern-day conservation "Sermon on the Mount" deep in the heart of Coronado National Forest overlooking city of Tucson

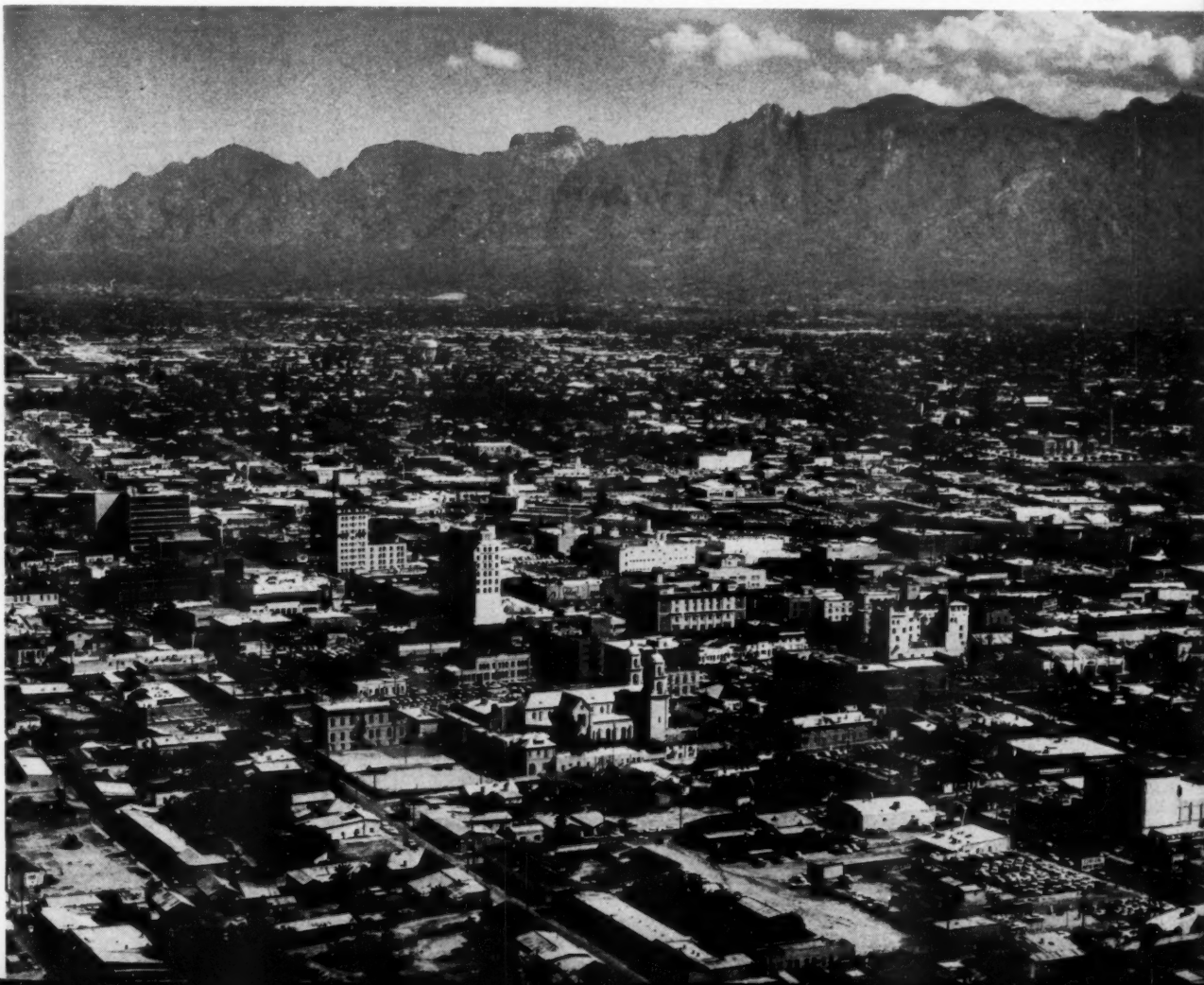
the-ground inspection of the watershed. From the highest promontory on the peak they will be able to see Mexico 80 miles away, the desert, copper mining operations, and Saguaro National Monument to the Southeast, and the city of Tucson to the south.

The keynote address will then be presented at the Forest Service campground at Rose Lake in a setting of ponderosa pine trees on top of Mt. Lemmon. At a time when grazing, water and other multiple use problems are receiving much attention,

Chief McArdle has indicated he will welcome an opportunity to present what might be billed as a conservation "Sermon on the Mount." The opening day of the meeting on which Chief McArdle will speak also coincides with the birthday of Theodore Roosevelt who contributed so much to forest conservation and whose centennial we celebrate this year.

Another highlight of the conference will be an address by Edward Woosley, Director, Bureau of Land Management, on the subject, "Federal Responsibilities in Water."

Tucson, a city of about 200,000, is site of University of Arizona, long known for studies in the field of dendrochronology





SUN RIVER MEDICINE

THE elk hunting citizens of Montana have many game management projects to be proud of—but they have none more spectacular than an unusual combination of refuge, wilderness area and the state operated Sun River Game Range. A herd of 3,000 of the finest elk in North America are maintained by this combination. It is now a showplace for elk—but could become a showplace for oil derricks.

Over 4,100 acres of the game range is public domain—belonging to all the people. This land has been

withdrawn for wildlife purposes and is an integral part of the state managed 20,000 acre elk winter range. Oil leases have been issued on all the withdrawn lands. Oil and elk, at least at Sun River, are not compatible.

Secretary of the Interior Seaton approved new oil leasing regulations for federal wildlife lands on January 8, 1958. These regulations will solve many past problems of oil and wildlife. They provide for just such withdrawn lands as those of the Sun River Game Range. Under the new

regulations the State Game Department, the United States Fish and Wildlife Service, and the Bureau of Land Management will jointly determine which lands shall not be available for oil leasing. Final decision in all cases will be made by the Secretary of Interior. The new regulations establish clear cut guide lines for oil leases on all classes of federal wildlife lands, and provide much needed protection.

Conservationists believe the Montana Game Commission and the Fish and Wildlife Service will request oil

Sun River Game Range—where Great Plains and Rockies meet

Thus, even though future leases are forbidden, the mere existence of leases on Sun River land presents a grave threat to a large herd of elk. Intensive oil exploration and production on the withdrawn land would damage the game range beyond repair. The lands are not in a single block, but are scattered throughout the 20,000 acres in small parcels. Oil development would be distributed over the entire project. Physical damage to the range would result as land was used for roads, drill sites, sumps and human accommodations. Elk on the Sun River Range are wild and easily frightened from the area. Oil operations would drive them far, and eliminate the suitability of the whole project to supply critically needed winter range.

The new regulations can protect the Sun River Game Range after 1960. Until then, oil can ruin the range. To understand the danger of oil wells to elk we must understand

the history of elk on the east slope of the Rockies, and the history of the Sun River Game Range in particular.

The Sun River Country has been famous for elk for a long time. Developments in the last few years will make it even more famous in the future. White man hunted elk here for the first time on July 10, 1806 when Captain Meriwether Lewis dispatched his hunters to take elk for clothing and food. His small party had just finished an arduous journey eastward over the Rockies. Elk are still hunted every fall in the same general area.

Many changes have occurred in land use and elk habits since 1806. Most of these changes were bad for elk for the first 140 years, but for the last 11 years elk have benefited. Elk originally inhabited the Great Plains, not the high mountains we associate with a present day elk hunt. The Sun River area was a famous



Elk move down from the high country about Christmas time and stay until spring. Grass under the snow makes an easy winter for them on this natural winter range.

By WILLIAM B. MORSE

leasing be forbidden on the Sun River Game Range. There is no reason to doubt that this request will be approved. The Sun River Game Range will then be safe from oil exploitation. That is, however, in the distant future; how about the next two years when the game range is still in danger? Oil and gas leases on federal land within the game range expire between June 30, 1958, and September 1, 1960. Until each lease expires, the oil companies can start drilling. If an oil discovery is made, leases continue indefinitely.

Elk do extensive damage to haystacks, and are in competition for forage on cow ranges. Establishment of Sun River Game Range has helped alleviate this condition



hunting ground for Indians from both sides of the continental divide. Indians called it the Medicine River. Buffalo, elk and smaller game furnished hides and food. Grizzlies and wolves abounded in the area. As the white men moved in, most of the wildlife was eliminated. Meat and hide hunting were big business, buffalo were exterminated, and elk reduced to a tiny remnant. Elk are adaptable and, under pressure from man, they will change their habits. The remnant of elk deserted the Great Plains and moved to the mountains where they survived near the continental divide. Restrictions were made on kill and hunting seasons, but here, as in most other parts of the country, restrictions were too little and too late. Enforcement of game laws was inadequate or nonexistent.

This, then, was the situation shortly after the turn of the century. The first step in rehabilitation of the Sun River Elk herd was taken when the state of Montana created the Sun River Game Preserve. This preserve was located just east of the continental divide and encompassed an area roughly 35 miles long by 10 miles wide. It covered the high country and not the lower portions of the mountains. Elk were given vitally needed protection and, as law enforcement became better, elk numbers started a slow increase. By 1926 elk were again found in the foot hill country between the Great Plains and the Game Reserve.

Winter in the Rocky Mountains is severe and the elk developed a habit of migrating out of the mountains to their historic winter range on the plains. By this time, however, most of the plains land was privately owned and was used as ranch land. Elk winter range and cattle ranches are not a compatible use. Elk do extensive damage to hay stacks and are in direct competition for the forage on cow ranges. There has been only one practical solution developed—keep the elk off of this land. Paneling or fencing the hay stacks on one ranch was not the answer here, elk would move on to the next and the next.

So started the hard job of herding elk from the plains back to the foothills. This all-winter task became a way of life for Bruce Neal, warden in charge of the area. It took a mountain man like him to do this discouraging work for sixteen winters. He knew elk to begin with, but by 1947 he could herd wild elk better than anyone else in the country. These strenuous efforts kept elk

damage to ranches within reasonable limits. At the same time, elk were concentrated in the foothills and the inevitable overgrazing started. The elk were eating more than the range could produce. Each year more and more areas of over-used range appeared in the foothills and on the adjacent portions of the Lewis and Clark National Forest.

It became increasingly difficult to herd elk away from the better food on the ranches. The future of the Sun River elk herd was in doubt. The only solution seemed to be a drastic reduction of elk numbers to bring the herd into balance with the available range.

This grim future changed overnight when a large block of private land in the foothills was offered for sale. The State Game Commission acted with vigor and the purchase of the land was rapidly completed. With this land as a base, exchanges were made, state school lands leased, and public domain withdrawn for wildlife use. All this was not accomplished at once but by the end of 1948 the Sun River Game Range existed in nearly its present size of 20,000 acres of high plains and foothill land, used only for wildlife range.

The game range is a winter range operation. Elk move down from the high country about Christmas time and stay until Spring. The back or west side of the range is a solid mountain mass and the main elk migration routes must pass around each flank. The route to the north will bring elk directly on to the state area, but routes to the south terminate on the plains 5 to 10 miles south of the range. Herding is done to turn elk to the state area, and occasional herding must be done during the winter when elk drift or are frightened away from the range.

When the Sun River Game Range was first established, forage conditions were poor. Since that time only winter grazing of elk has been allowed and the composition of the range species has changed. Livestock grazing is prohibited and elk use the range only in winter, making a modified deferred grazing program. Annual grasses comprised the bulk of the feed, now native, high plains perennial grasses have returned and only remnants of the annuals are to be found. Range conditions continue to improve each year. This is natural elk winter range, and no artificial feeding is done.

The range and the surrounding country are interesting from many viewpoints, and unique for some.

The scenery is incomparable. The range is situated on the exact western edge of the Great Plains. Where the mountains start the plains end. Even the plants partake of this break in geography. Conditions change so rapidly that there is no gradual shifting of plant life. It almost seems an ecological battle between plains plants and mountain species.

One thing making Sun River unique is the value of the Game Reserve. Modern game management is well beyond the use of big game refuges, many have been eliminated. Game managers would like to get rid of most of the others. The Sun River Reserve still serves a purpose and a good one, primarily due to terrain. Much of the elk summer range lies west of the continental divide in the Flathead National Forest and takes in most of the Bob Marshall Wilderness Area. The only winter range available on that side is in the deep canyons and bottoms. Relatively small numbers of elk can winter there, and winter losses are always high. Natural elk migrations and hunting pressure in the wilderness area force the elk east across the divide to the Sun River Game Reserve where they spend the late fall months, a gathering ground as it were. December storms start the final movement of elk out of the reserve to the game range.

Not all the elk winter on the state range. Estimates of the total elk herd are about 4,000 head. The wintering group on the game range number about 2,500. The remainder winter in the foothills and lower portions of the Sun River Watershed. Without the state operated area, the entire herd would have to be reduced to 1,000 or 1,500 animals. The State Game Department estimates the Sun River elk herd is worth at least \$100,000 a year to the economy of Montana. This, balanced with the total cost of acquisition development and maintenance of the game range to date of slightly over \$250,000.00, shows a very favorable cost-benefit ratio. The game range is not only good for the hunters of Montana it is good business for the whole state.

Where the elk are wintering in maximum numbers it is a sportsman's dream. He must only dream about it though—as no trespassing is allowed on the range during the winter season. Sun River Elk are wild, and sightseers could easily scare them off the range and onto private ranches. Hunters have had an opportunity to bag elk and deer on the

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By WARREN D. BRUSH

THE BUCKEYES

ANYONE who has seen a buckeye tree in full bloom in early summer is not likely soon to forget it. Its large, pyramid-like clusters of flowers standing erect at the ends of the branches are crowded among the dense foliage. The large, palmately compound leaves have five to seven leaflets. The fruit, which contains one to three reddish-brown nuts, and the opposite branching also help to make it easy to recognize. Boys find these smooth, shiny nuts, called "buckeyes," attractive and several are likely to be found in his pockets together with other collections.

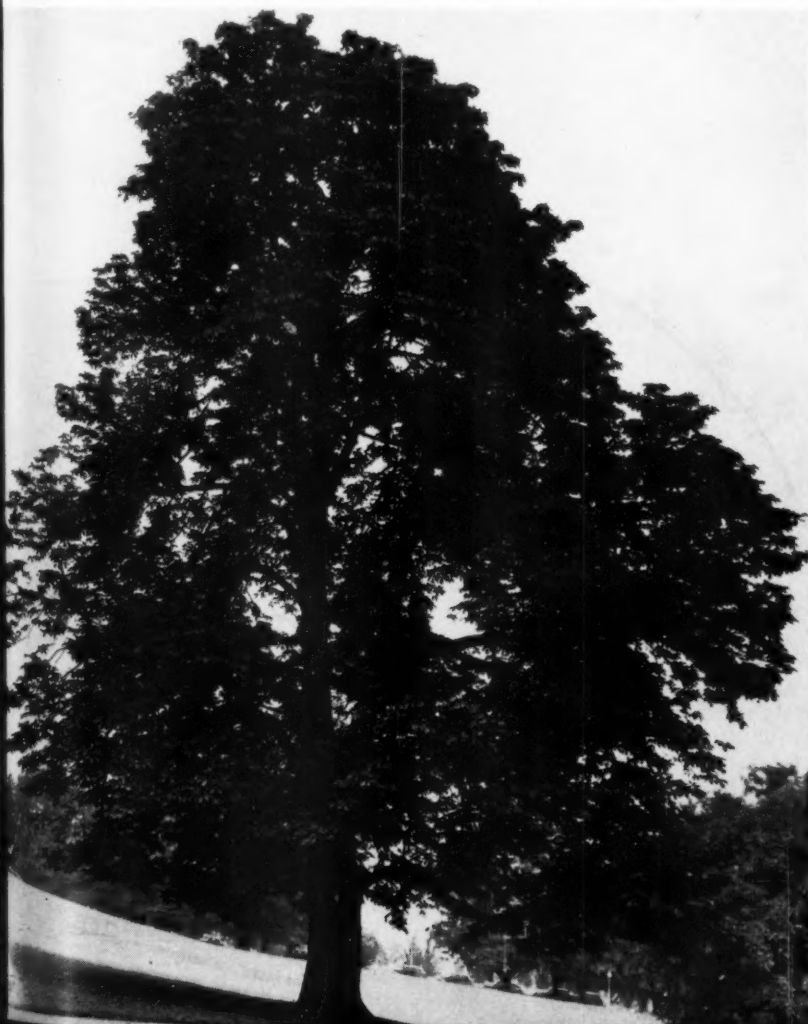
Three species of buckeye growing in the United States may be considered of some importance: the Ohio

buckeye (*Aesculus glabra*), a small tree usually not over 40 feet in height and the yellow or sweet buckeye (*Aesculus octandra*), up to 90 feet high—both native to eastern United States; and horsechestnut (*Aesculus hippocastanum*) with spreading branches and dense foliage, growing to a usual height of 75 feet, a native of Europe and widely planted in this country.

The pale or dark yellow flowers of yellow buckeye are less attractive than those of the other two species in which the stamens extend out beyond the petals. In horsechestnuts the flowers are white tinged with red, in clusters eight to twelve inches

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Large spreading branches and dense foliage recommend horsechestnut as shade tree



Flower clusters of horsechestnut are 8 to 12 inches long

Yellow buckeye stamens do not extend beyond the petals



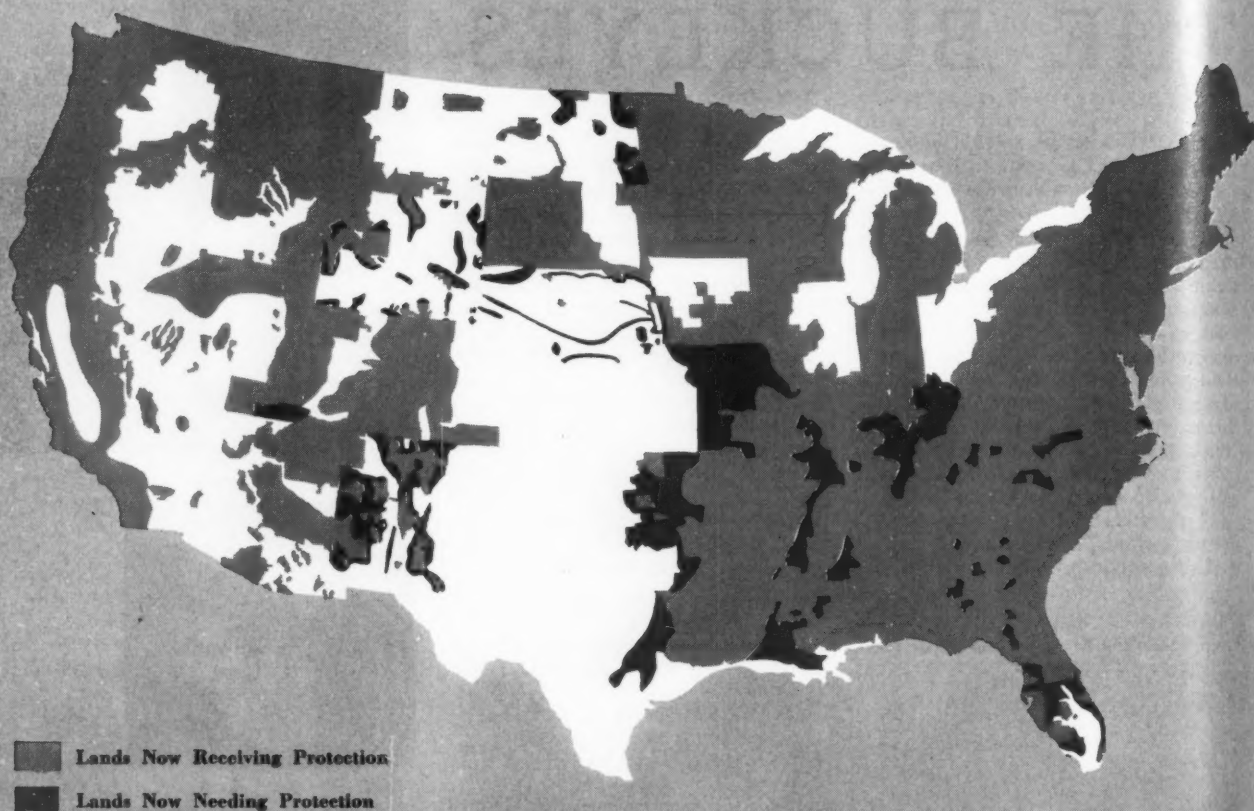
Ohio buckeye flowers resemble those of the horsechestnut

Smooth husk of yellow buckeye is unlike other species



Usually each fruit of yellow buckeye contains two "nuts"

Status of Forest Fire Control—1957



LET'S FACE IT

By KENNETH B. POMEROY

FORTY million acres of forest land still do not have fire protection of any kind. Another two hundred million acres are vulnerable under critical weather conditions although they receive some organized protection.

These are private lands, mostly small woodlands. There are another 225,000,000 acres of public land up in Alaska that also are inadequately protected. Five million acres burned there last year. But that's another story. Let's stick with the private lands in the states today and see what some of the state foresters have to say:

Fred H. Lang, Arkansas. "I think very few of us, in the South at least, have reached the point where our basic protection will discharge the states' responsibility . . ."

George O. White, Missouri. "We still have four million acres of forest land for which no protection prevails. . . . A reasonable federal increase would be a great help in our getting increased state funds."

C. H. Coulter, Florida. "Florida still has 3,750,000 acres in need of protection. In the last ten years federal participation in cooperative fire control has dropped nation-wide from 47 percent down to 23 percent

(Table 2). In view of the added cost of doing the job, the need to take in additional acreage, and the necessity of forest products for national security, an increase is well justified." (Ed.—Actually state expenditures are far outstripping federal appropriations in rate of increase. There has not been an actual monetary reduction.)

J. Whitney Floyd, President, Association of State Foresters. "We have never had appropriated to us the amounts authorized for cooperative fire protection (Table 2). The original intent of the Clarke-McNary Law was that the federal govern-

Current forest fire protection programs will not hold fire

damage below the level at which it would seriously interfere

with forest products yields and with social public benefits

ment would be on a 50-50 matching basis with the states. Our area and cost figures (Table 1) indicate that we are nowhere nearly adequately financed to do this nationwide job."

Periodically since 1920 a study has been made in each state to determine the job ahead in the protection of non-federal forest and watershed lands. The most recent study was approved by the Executive Committee of the Association of State Foresters on March 1, 1957. This Area and Cost Summary (Table 1) discloses a need for \$83,509,000 to provide basic protection on 434,770,000 acres. The total sum provided in the last year of record was \$45,336,506 to protect 395,863,511 acres.

The Area and Cost estimates were arrived at by detailed study of the manpower, equipment, construction and other needs of each unit in each state. This task was done by the states themselves following uniform guide lines developed through discussion with industry representatives, private landowners, state and federal men.

The level of protection planned is that which will hold fire damage below the level at which it would seriously interfere with the expected yield of forest products, and with social public benefits from these lands. Current forest fire protection has not reached this level. (Table 2.)

The need for better fire protection has been before the public a long time. Perhaps a brief review of past progress would be helpful.

Half a century ago, January 6, 1905, to be exact, 1000 delegates to the American Forest Congress resolved, "We earnestly commend to all state authorities the enactment and enforcement of laws for the protection of the forests from fire. . . ."

At the time only eleven states had created separate departments of forestry. None of them were adequately financed and all struggled with the dual task of educating the public while fighting fires. Nevertheless each state recognized the priorities which still are basic: a) get it under

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TABLE 1—1957 AREA AND COST SUMMARY

STATE	AREA TO BE PROTECTED (IN ACRES)	ESTIMATED COST OF PROTECTION
ALABAMA	19,990,000	\$ 4,307,000
ARKANSAS	16,535,000	2,879,000
CALIFORNIA	19,810,000	14,356,000
COLORADO	7,407,000	223,000
CONNECTICUT	1,989,000	227,000
DELAWARE	453,000	31,000
FLORIDA	20,500,000	6,038,000
GEORGIA	22,418,000	7,253,000
HAWAII	1,152,000	58,000
IDAHO	7,343,000	1,175,000
ILLINOIS	3,170,000	322,000
INDIANA	3,931,000	253,000
IOWA	2,277,000	92,000
KENTUCKY	10,774,000	1,040,000
LOUISIANA	15,383,000	2,866,000
MAINE	16,973,000	1,566,000
MARYLAND	2,850,000	507,000
MASSACHUSETTS	3,252,000	506,000
MICHIGAN	17,205,000	2,803,000
MINNESOTA	17,771,000	1,875,000
MISSISSIPPI	15,301,000	3,626,000
MISSOURI	13,825,000	1,396,000
MONTANA	6,915,000	747,000
NEBRASKA	1,231,000	18,000
NEVADA	2,216,000	168,000
NEW HAMPSHIRE	4,182,000	374,000
NEW JERSEY	2,095,000	482,000
NEW MEXICO	4,396,000	140,000
NEW YORK	12,995,000	1,231,000
NORTH CAROLINA	18,360,000	3,406,000
NORTH DAKOTA	228,000	28,000
OHIO	3,923,000	558,000
OKLAHOMA	8,248,000	1,342,000
OREGON	12,141,000	4,108,000
PENNSYLVANIA	14,704,000	1,035,000
RHODE ISLAND	434,000	174,000
SOUTH CAROLINA	11,175,000	2,216,000
SOUTH DAKOTA	2,827,000	105,000
TENNESSEE	11,473,000	2,227,000
TEXAS	14,884,000	2,397,000
UTAH	6,380,000	233,000
VERMONT	3,517,000	156,000
VIRGINIA	14,033,000	2,078,000
WASHINGTON	12,237,000	4,036,000
WEST VIRGINIA	9,007,000	817,000
WISCONSIN	15,297,000	1,950,000
WYOMING	1,563,000	84,000
TOTAL	434,770,000	\$83,509,000 ¹

¹ Exclusive of federal administration, inspection, and special services to cooperating states.

By WELDON D. WOODSON

EXPLORING THE NEEDLES



One of many impressive vistas is breakthrough of Salt Creek Canyon meander

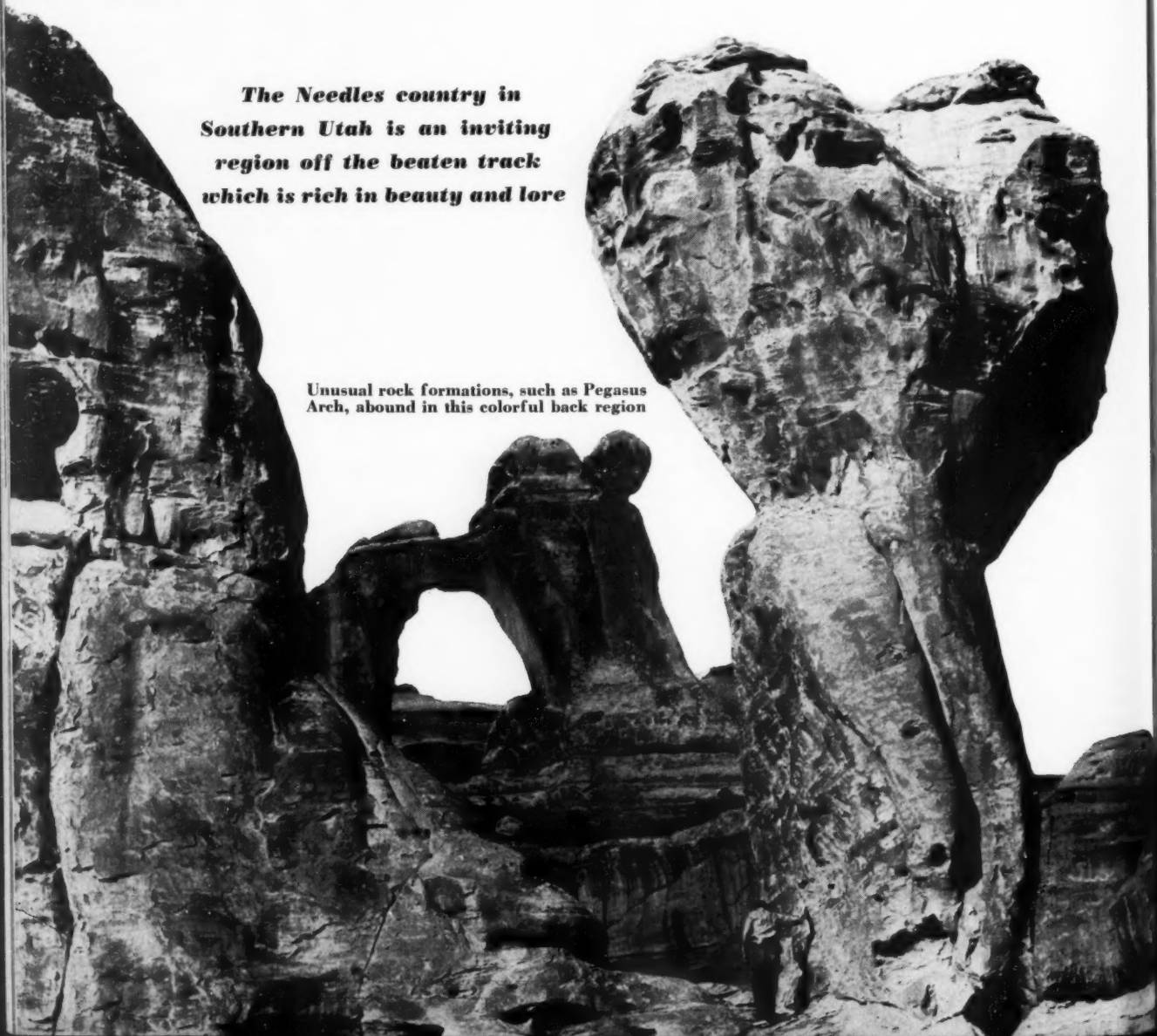
MARY BECKWITH, historian and explorer, was on one of the Mexican Hat Expeditions which the author described in the September, 1955 issue of *American Forests*. The boat she was in was in Cataract Canyon of the Colorado River in southeast Utah, near the junction of the Colorado and Green Rivers. As the boat traveled down the river, she happened to glance up at the precipitous canyon walls, and up and

up! There, on the canyon rim, she beheld what seemed to be Brobdingnagian giants with their arms folded austere peering down upon her.

But they were not human giants—instead, red and white sandstone formations up to several hundred feet in stature. The handwork of erosion, they consisted of spires and pinnacles. To some, the more slender spirals appear like mammoth needles projecting up from their pin cushion

The Needles country in Southern Utah is an inviting region off the beaten track which is rich in beauty and lore

Unusual rock formations, such as Pegasus Arch, abound in this colorful back region



EDLES

of solid rock. Because of this, the region bears the name Needles.

As Mary Beckwith gazed, she could not help but sigh to Kent Frost, boatman and cook of the expedition, "Oh, if I could get up there!"

"I'll take you," he said quietly, his sun-tanned, youngish profile in reflective thought.

At first, Mary supposed he was joking. Then, looking him straight in the eyes, she saw that he was dead earnest.

Frost explained that he was born and reared—and still lived—in Monticello, Utah, not far from the spirals that loomed up above them and that he knew the country well. Ever since a boy, he made it a practice when not working on his father's homestead to hike into the surrounding areas—a land of the piñon, cedar and sagebrush; a desert country which, with the advent of rains, supports in sand and crevice the evening primrose, blackbush, wild crabapple, soapweed, Indian paintbrush, locoweed, Oregon grape.

Frost further disclosed that he had a jeep which could negotiate the rock-torn terrain. If Mary could arrange a party, he would gladly take them in. No sooner said than a

(Turn to page 56)

Most jeep trails through area were made by cowboys carving out trails for stock



Besides the rock formations, visitors enjoy examining ancient Indian petroglyphs

Spires and pinnacles of solid rock bear striking resemblance to Manhattan's skyline



SON OF THE SIERRA NEVADA

By DOUG DEMAREST



Theodore Roosevelt
with John Muir on
inspection tour at
Glacier Point, 1903

Underwood & Underwood

Plaque may be seen by trail
near base of Yosemite Falls





From the floor of Yosemite Valley, El Capitan (at left) rises 3604 feet; Clouds Rest and Half Dome may be seen in the distance

PROBABLY no man has ever known, or ever will know, the Sierra Nevada as well as John Muir, the Scottish born writer, explorer, and naturalist. His love of wildness saved for us vast areas of outdoor America that were coveted by the land grabbers of the late 1800's and the early 1900's.

During the ten years in which the Sierra Nevada was his home, his life, and the church in which he worshipped, Muir explored and studied every square inch of this range—a single, glaciated block of granite that starts at Tehachapi Pass on the south

and extends north for about 430 miles to Mount Lassen.

Muir called the Sierra Nevada "The Range of Light," for it always seemed to him that these towering, snow-capped mountains received more light than other mountains.

In Muir's day, as now, the winds of the Sierra Nevada set millions of pine needles stirring with a dry but musical sound that brings to mind the thin tinkle of glass wind chimes if heard at a distance. He heard, too, the soft rumble of waterfalls and cascades foaming down into glacial

canyons from heights that are as much as 2,000 feet; the lyric notes of the water ouzel, or dipper, that darts in and out of the Sierra's rushing streams; and the whistle of the wind around the corners of bare granite boulders in the High Sierra, where only lichens, mosses, and a few flowering Alpine plants grow.

Muir was nearly twenty-nine years old when he first heard the music of the Sierra Nevada—about eighteen years after his arrival in America from Dunbar, Scotland, where he was born April 21, 1838.

John Muir knew a little some-

thing of America before he got here. In a grade-school reader (*Macaulough's Course in Reading*, he believes), he had read and reread selections devoted to the life histories of the fish hawk and the bald eagle. These were written by the Scotch ornithologist Alexander Wilson, who traveled in America while the country was still mostly wilderness. Though John enjoyed these pieces, the one in the reader best liked by him was an Audubon account of the passenger pigeon.

Frequently John and his brother David studied their grammar and other lessons in the dancing light cast by the fire on the hearth at their grandfather Gilrye's, their maternal grandfather. One evening when the boys were studying, their father tromped in.

"Bairns," he announced, "you needna learn your lesson the nigh, for we're gan to America in the morn!"

John described his arrival in Marquette County in south-central Wisconsin as a "sudden plash into pure wilderness."

For a few weeks after the arrival in Wisconsin, John and David ran wild and free. They discovered such New World wonders as "the brave, frost-defying chickadees," and "the brave little bluebirds, darling singers as blue as the best sky." And they "began an acquaintance with the frogs and snakes and turtles in the creeks and springs."

All too soon, however, their father set the boys and a sister, Sarah, to work. This was the first contingent of Muirs to arrive in America. In the fall of 1849, John's mother and his other brothers and sisters joined them. And from then on, all the Muir children started work soon after four o'clock in the morning when their father routed them out of bed. And it did not end until nine at night when they crawled into bed, exhausted.

The slave labor to which Daniel Muir put his children went on for years. John endured this life of drudgery, during which he almost lost his life while digging a well shaft, until 1860. His flair for invention finally freed him. He whittled all sorts of devices including a number of clocks. A neighbor suggested that John exhibit some of his clocks at the State Agricultural Fair to be held at Madison.

Without parental approval and with only a ten dollar gold piece in his pocket—the gift upon his departure for America of grandfather Gilrye—John Muir quit home.

On September 25, 1860, the *Wisconsin State Journal* carried a front-page story, headlined, "An Ingenious Whittler," and reported, "The wooden clocks of our Marquette Co. friend were among objects most surrounded by crowds." The *Evening Patriot* of the same date announced, "... surprising and could only have been executed by a genius."

After the Fair's close the "genius" decided to get an education. He spent four years at the University of Wisconsin, working as he did so. He took no regular courses. Muir said of his education, "I picked out what I thought would be most useful to me, particularly chemistry, which opened a new world, mathematics and physics, a little Greek and Latin, botany and geology."

John left the university with regret; he felt that he should have stayed longer. Years later, however, he wrote: "Anyhow I wandered away on a glorious botanical and geological excursion, which has lasted nearly fifty years and is not yet completed, always happy and free, poor and rich, without thought of a diploma or of making a name, urged on and on through endless, inspiring Godful beauty."

The glorious botanical and geological excursions took Muir in all directions of the compass. They included his thousand mile walk to the Gulf of Mexico, where he succumbed to malaria in Cedar Key. This is a Gulf town south of the Suwannee River. And when he was fully recovered, he took passage on the *Island Belle* for New York.

The "terrible canyons of New York" were not to Muir's liking, though twenty-five years later when he visited Central Park, he was extremely interested in the glacial scratchings on the park's outcroppings of granite. He spent ten days in New York, then on March 10, 1869, sailed steerage on the *Nebraska* for Aspinwall (now Colon) and the Isthmus.

Eighteen days later he arrived in San Francisco. And with hardly a pause there he set out for the Sierra Nevada—the goal he had set for himself after seeing some pictures of this California range during his recuperation in Florida.

Muir walked as usual, wandering this way and that, the better to enjoy his first glimpse of California's flora. Eventually he reached his destination — the snow-capped Sierra Nevada, the White Range, sheer and rugged on the East, but sloping gradually into the Sacramento and San Joaquin Valleys on the West.

For the next ten years, Muir lived, studied, and worshipped in the Sierra Nevada, whose sky-scraping mountains thrust upward through five life zones.

Sometimes Muir did his "botanizing" alone. Sometimes it was in such distinguished company as Harvard's famed Asa Gray, to whom Muir sent plant specimens. After Gray returned to Harvard following a Sierra field trip with Muir, he sent back copies of his botanical works, and in a continuing correspondence urged Muir to search for new or curious specimens.

Muir searched, and searched so thoroughly that he sent Gray many new plant specimens. One of these was a cinquefoil that Gray named *Ivesia Muirii*. Several species of Sierra butterflies were also discovered by Muir. After they were classified, one was given the scientific name, *Thalca muri*. And a subspecies of pika, or cony, found at altitudes of 9,300 feet near Ten Lakes in Yosemite, is known scientifically as *Ochotona princeps muiri*.

The base of operation for Muir in the Sierra Nevada was Yosemite. Of day breaking over these mountains, he commented, "When the first level sunbeams sting the domes and spires, with what burst of power the big, wild days begin."

Muir's days in the Sierra Nevada were all big and wild. He was a man at one with his destiny. He went into the woods an obscure naturalist, but "came out" a nationally known figure.

Muir became the most famous guide in the Sierra Nevada. He knew the entire range as the wild animals of these mountains knew the individual bits of their territories. As his fame for his knowledge of the Sierras grew, his services as a guide were in demand. He conducted Ralph Waldo Emerson's sight-seeing party through Yosemite. Emerson said of him, "There is a young man from whom we shall hear."

Emerson scored a dead-center bull's eye with his prognostication about Muir's future. In his valley workshop, 4,000 feet above sea level, Muir studied the erosion in granite made by stream and ice action. He was the first to discover living glaciers in the Sierra Nevada.

Muir advanced the theory that the valley had been formed by glaciation. The state geologist for California, then Dr. Josiah Dwight Whitney, took violent exception to this theory. He claimed the valley was the result of some ancient cataclysms

(Turn to page 61)

Reading
about

RESOURCES



By MONROE BUSH

The Glory Trail by Ernest Swift.
(The National Wildlife Federation, Washington, D. C. 1958. 50 pp. Single copy, free.)

Ernest Swift possesses in his own person the same fierce love of personal freedom, the same physical respect of an outdoorsman toward the wealth and strength of nature, that he most admires in the pioneers who opened the West and built a nation.

The Glory Trail is a brief, dynamic record of U. S. growth. Swift himself describes it as "a panorama of motivation and action." He is writing about men whom he understands. There is real "feel" here for the explorer, the pioneer, the lumberjack, the gandy dancer. Often Swift does not approve of what these men did to the land and to the Indians, and then he spits his anger at them in unforgettable phrases. But his inherent respect for their self-sufficiency, for their willingness to "go it alone," shines through on every page.

This little book is no candidate for a Pulitzer Prize. Ernest Swift did not intend that it should be. Yet if I could do so, I would require every high school senior in the U. S. to read and re-read its 50 pages until they were all but memorized, for I know of no other simple, unpretentious book that is capable of contributing so much to good citizenship as *The Glory Trail*. Perhaps that is because its author is, himself, as good a citizen as you'll ever know.

The Trees on Your Street by Desmond Muirhead. (Portland General Electric Co., Portland, Oregon. 1957. 36 pp. \$2.00.)

This book opens with the question: "Houses are designed . . . so are gardens . . . why not streets?" The illustrations that have been assembled by landscape architect Desmond Muirhead furnish compelling

evidence of the almost miraculous transformation that can be achieved in city or suburb when streets are designed.

Here is an invitation to a beautiful environment, at the price of no more than imaginative planning. Give a copy to your town councilman.

Earth and the Layman by Mark W. Pangborn, Jr. (American Geological Institute, 2101 Constitution Ave., N. W., Washington, D. C. NAS-NRC Pub. No. 559. 1957. 68 pp. \$1.00.)

This annotated bibliography of the earth sciences has been prepared by Mark Pangborn with an intelligent perception of the layman's

"The extent of the forest influence on America's history, on the character of her people, on her culture and economy, is almost beyond calculation and estimate."

Ernest Swift,
The Glory Trail

need. Student, rock hound, amateur geologist—all will find here an easy, practical guide to the useful literature in his field. Significantly, Pangborn's selection of subjects is broad enough to entice the amateur to a study of things outside his particular interest. It is a basis, let us say, for a liberal education in the natural sciences.

Part I embraces the earth sciences under 18 widely ranging topics. Part II lists the literature of specific localities, compiled by states.

Many omissions from this bibliography will occur to any naturalist, but the astonishing thing is that Pangborn has been able to include so much essential material within the modest, handy size of this book. It is a fine, useful job.

The Forest Is The Future by Jonathan Daniels. (International Paper Co., N. Y. 1957. 66 pp.)

This is the story of the growth and promise of Southern forestry, idealized by one of the South's most gifted journalists. The format, the photographs, the text itself, are as handsome and lush as a loblolly forest. It reads like a novel. It is moving and persuasive. Resource writing seldom comes this close to being literature.

The Exploration of the Colorado River by John Wesley Powell. (Abridged from the 1st ed. of 1875, with Introduction, by Wallace Stegner. Univ. of Chicago Press. 1957. 138 pp. \$3.75.)

John Wesley Powell, one-armed survivor of the Battle of Shiloh, accomplished the last major exploration on the North American continent when, in 1869, he and nine hardy companions undertook a trip by boat the entire length of the Colorado River from Wyoming to Arizona.

This was a major feat, demanding full measure of both courage and skill—and fiction is flat and colorless by comparison to Powell's narrative. The University of Chicago Press has done us all a service in re-publishing this classic American tale of adventure.

Reading the Landscape by May Theilgaard Watts. (Macmillan 1957. 230 pp. \$4.75.)

The sub-title of this book is "An Adventure in Ecology." It is literally that. The amateur naturalist will find both adventure and ecology in this fascinatingly fresh approach to several specific scenes, to glimpses of the Great Smokies, the Prairies, a stream in southern Indiana, etc. Mrs. Watts is a distinguished naturalist who knows her business, which is to

(Turn to page 70)

TD-24 Planet Power beats "dead-track drag"...boosts

—for Harper Brothers Logging Co., Eugene, Oregon

Here's the way Malcolm Harper, of Harper Brothers Logging Co., Eugene, Oregon, describes their firm's experience with International TD-24 crawler performance:

"TD-24 ability to steer with live, *full-time power on both tracks* is the feature that puts this crawler ahead of all others. Over 500 hours of use building roads and logging have proved to us the value of being able to steer without having to drag a dead track around half the time.

"The TD-24 almost builds its own roads by hugging the mountain slopes *with full power on both tracks* and pushing a full load ahead of the dozer.

"On actual logging, the TD-24 can turn smoothly up adverse grades with as big a log load as it can pull straight ahead.

"Record bf on the landing"

"With Torque-Converter drive, the TD-24 has combined smooth, easy operation with terrific pulling power—that puts a record-making board feet of logs on the landing."

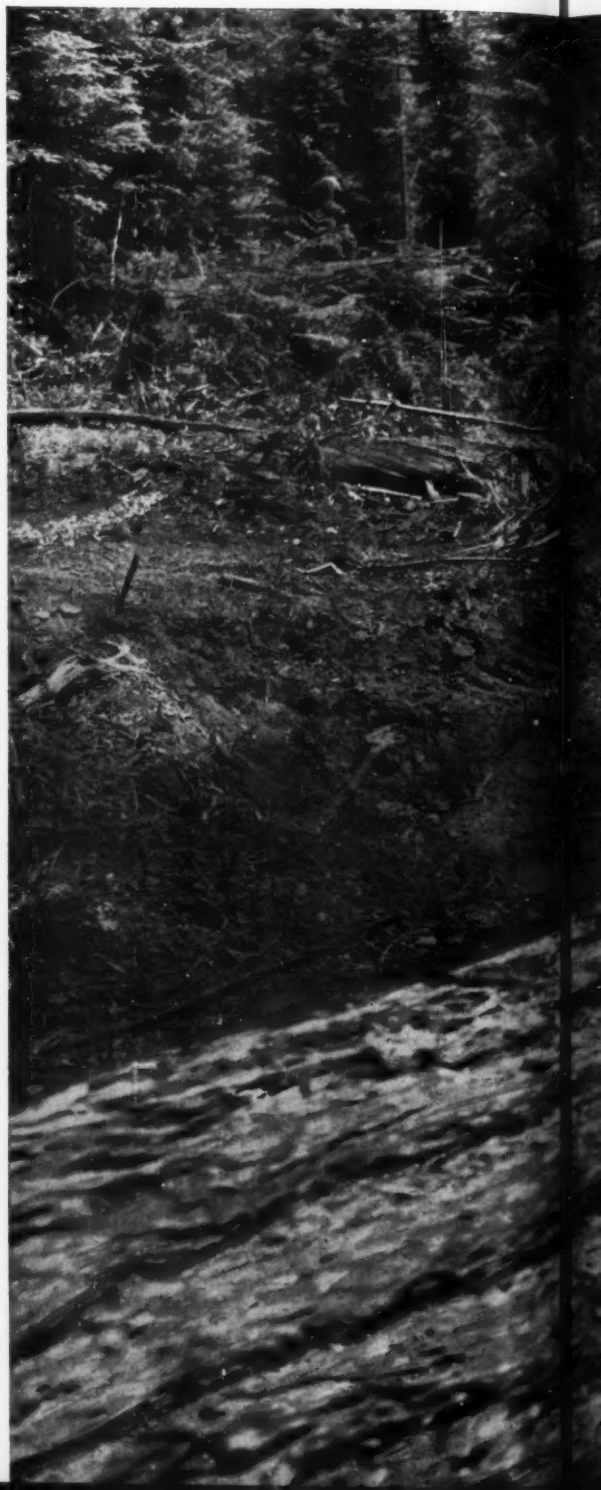
Prove what it means in logging profit production to command International TD-24 capacity with *time-proven* and *exclusive* Planet Power steering control. Try this fingertip full-load steering that gives you full-time live power on both tracks while turning—eliminates power-wasting, load-limiting "dead-track drag" Try instant, stall-preventing Hi-Lo shifting. *Compare* the TD-24 to anything else on tracks! See your International Construction Equipment Distributor for a demonstration.

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Construction
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A COMPLETE PACKAGE INCLUDING: Crawler, Wheel, and Side-Boom Tractors... Self-Propelled Scrapers and Bottom-Dumps... Tractor and Rubber-Tired Loaders... Off-Highway Trucks... Diesel and Carbureted Engines... Motor Trucks



steering log and road production

Operating in U. S. Forest Service timber northwest of Eugene, Oregon, Harper Brothers Co. do most of their falling in winter, when snow prevents trucking. During logging season, the torque Converter TD-24 "bobtail skids" the logs to the landing. Before taking out any logs, the Harpers built a 2-mile road with over a dozen switchbacks up steep mountainside.



TRAIL CALL!

By DOROTHY DIXON

Trail Riders of the Wilderness Schedule of Expeditions for 1958

FLATHEAD-SUN RIVER WILDERNESS, MONTANA

July 1 to July 12; July 12 to July 23
\$220 from Missoula, Montana
Parties limited to 25

QUETICO-SUPERIOR WILDERNESS, MINNESOTA—(Canoe Trip)

July 14 to July 23
\$210 from Ely, Minnesota
Party limited to 17

WIND RIVER MOUNTAINS, BRIDGER WILDERNESS, WYOMING

July 15 to July 26; August 5 to August 16
\$250 from Pinedale, Wyoming
Parties limited to 20

HIGH UINTAS WILDERNESS, UTAH

July 22 to August 1
\$230 from Vernal, Utah
Party limited to 20

SAWTOOTH WILDERNESS, IDAHO

July 29 to August 8; August 12 to August 22
\$225 from Sun Valley, Idaho
Parties limited to 25

EAGLE CAP WILDERNESS, OREGON

August 4 to August 15
\$230 from La Grande, Oregon
Party limited to 25

MAROON BELLS-SNOWMASS WILDERNESS, COLORADO

Aug. 5 to Aug. 15; Aug. 16 to Aug. 26
\$230 from Glenwood Springs, Colorado
Parties limited to 20

SAN JUAN WILDERNESS, COLORADO

Aug. 12 to Aug. 22; Aug. 25 to Sept. 4
\$230 from Durango, Colorado
Parties limited to 25

TETON WILDERNESS, WYOMING

August 12 to August 23
\$250 from Moran, Wyoming
Party limited to 25

PECOS WILDERNESS, NEW MEXICO

September 8 to September 19
\$225 from Santa Fe, New Mexico
Party limited to 25

HORSEBACK TRIP IN THE GREAT SMOKIES

Enjoy 10 wonderful days, May 21 to May 31, riding with The American Forestry Association in the Great Smoky Mountains National Park, North Carolina. The Cataloochee Ranch on Fie Top Mountain will be headquarters for seven daily rides to Sheepback Lookoff, Purchase Mountain, Paul's Gap, Balsam Mountain and other interesting points. In addition there will be a three-day pack trip from a base camp in the park, including a ride to the crest of Mt. Sterling.

Accommodations are limited to 20 riders. Make your reservations early and enjoy the superlative scenery, rushing waters, smoke-blue peaks and colorful blooms of laurel, rhododendron, azaleas and dogwood. \$200 from Asheville, North Carolina.

Write or wire for detailed information, itineraries, and reservations

THE AMERICAN FORESTRY ASSOCIATION

919 Seventeenth Street, N.W.

Washington 6, D. C.

EXPLORING high mountain trails on horseback is a delightfully different and thrilling vacation. During the coming summer, under the sponsorship of The American Forestry Association, the Trail Riders of the Wilderness again will participate in fourteen horseback expeditions in the great primitive wilderness regions of Montana, Wyoming, Utah, Idaho, Oregon, Colorado and New Mexico. One canoe caravan will explore the Quetico-Superior water wilderness of the Superior National Forest in Minnesota.

A new feature of the 1958 program is a ride in the unspoiled scenic back country of the Teton National



Forest and upper recesses of Yellowstone National Park in northwest Wyoming. The dates for this pioneer expedition are August 12 to August 23. It begins in the famous Jackson Hole country—a region of high plateaus, lush valleys and mountain meadows. Several hundred miles of trout streams and many small mountain lakes provide excellent fishing. The region to be explored lies along the Continental Divide and includes the headwaters of the Yellowstone and Buffalo Rivers and smaller tributaries of the Snake River. Ted C. Frome, of Afton, Wyoming, will outfit this party of riders. Mr. Frome is thoroughly experienced in the pack-

ing business and knows what Trail Riders require in organization, guide, and pack service.

In July, two parties of riders will explore untamed forests in the Flathead-Sun River Wilderness of the Flathead, Lolo and Lewis and Clark National Forests, Montana. This vast roadless region straddles the northern Rockies and is a domain of lofty mountains, softened by green virgin forests and luxuriant flowered valleys. Joe Murphy, of Ovando, Montana, has been operating this trip since 1933, the year the Trail Riders of the Wilderness program was initiated. Experienced riders signing up for the July 1 to July 12 and

July 12 to July 23 trips in this glaciated mountain country of sparkling lakes and flowered valleys are in for real adventure. Eager anglers will find superb fishing grounds in the Flathead-Sun River Wilderness.

Walt and Nancy Lozier, of the Open Box R Ranch at Cora, Wyoming, are anticipating the arrival of Trail Riders who sign up to explore the Wind River Mountains in the Bridger National Forest of Wyoming, July 15 to July 26 and August 5 to August 16. The trip is a popular one and quite a few Trail Riders are repeating the ride this summer. The country is associated
(Turn to page 42)

Trail Riders pause a while to enjoy the unspoiled scenic beauty of the San Juan Wilderness Area in Colorado



Solving the Stubborn Klamath Dilemma

(From page 22)

ters of the state. But it has at stake the future of a precious resource. At its heart, also, is the question of justice and equity in dealing with the descendants of America's original owners, even though some of these people may need guardians or trustees to help in husbanding their funds. Oregon's newspapers have discussed the question thoroughly and objectively. The Klamath termination issue has been studied with care by journalists like former Governor Charles A. Sprague of the *Salem Statesman*, Herbert Lundy and Malcolm C. Bauer of the *Oregonian*, Roy J. Beadle of the *Oregon Journal*, Robert Frazier and William Dean of the *Eugene Register-Guard*, Robert W. Chandler of the *Bend Bulletin*, Frank Jenkins of the *Klamath Falls News & Herald*, J. W. Forrester of the *Pendleton East-Oregonian*, Eric Allen of the *Medford Mail-Tribune*, and Charles V. Stanton, *Roseburg News-Review*. I am grateful to them for awakening public understanding to the significance of the problem. For example, Mr. Chandler of the *Bulletin* has set forth in admirably succinct fashion the three fundamental phases of this stubborn dilemma. Here are his words:

"1. To obtain the maximum possible dollar amount for the Indian owners of the Reservation.

"2. While doing so, to assure that the timber, water and wildlife resources of the Reservation will continue to be managed wisely for the benefit of all the rest of the people.

"3. Some method of handling must be decided upon which will assure wise management of the resulting funds for those unable or untrained to provide that management themselves. . . ."

I endorse Mr. Chandler's three points unreservedly.

In a letter to me, dated September 26, 1957, Secretary Seaton included this paragraph:

"The two problems confronting both the federal government and the state of Oregon are protecting the property rights of the Klamath Indians on the one hand, and providing for the sustained-yield management of an important natural-resource area on the other. Public ownership would accomplish both of these objectives. If there

is any reasonable alternative to public ownership which would accomplish the same results, we believe such an alternative should be thoroughly explored."

I do not think the Secretary's prowess as an explorer, alas, can compare with that of Lewis and Clark. It seems to me the proposal of the Interior Department lacks the merit of the clear-cut, specific provisions of my bill. Under the department's measure, it would be possible for a large lumber company to buy one or two panels out of the very heart of the Klamath checkerboard. This would compound the administrative difficulties of administering the remainder of the lands as a national forest. It could become a duplication of the legal labyrinth in western Oregon where private lands, O&C lands and state lands form a complicated mosaic. Right now, to cite an example, I am pressing the state's claim for \$181,000 in fire-fighting costs as a result of the Vincent Creek fire of 1951, which roared across this tangled pattern of land ownerships.

Furthermore, the Seaton bill would pose two questionable precedents. It would sell the Indian timber lands only in immense tracts which none but the largest lumber operators could even contemplate bidding upon. Small wonder that the Western Forest Products Industries, representing small and medium-sized sawmills, testified against the measure! Secondly, the Seaton bill would create the practice of requiring a sustained-yield covenant to accompany timber land sold into fee-simple private ownership. I wonder what the large lumber companies think of this? In the 1930's, they bitterly opposed the bills by Representative Walter M. Pierce of Oregon to require certain comparatively mild silviculture methods on private lands. The Secretary's Klamath proposal goes far beyond that. What attitude do the big timber corporations take toward such a startling precedent? Even the more liberal Western Forest Products Industries has criticized it, through testimony by its counsel, Leonard Netzorg.

In testifying before the Senate Subcommittee on Indian Affairs, one of America's great and distinguished foresters summarized the obligations facing us in this situation. Declared Lyle F. Watts, ex-chief of the United States Forest Service:

"It is the federal government that has raised the issue of the disposal of this property. Traditionally, the federal government has assumed responsibility for the American Indian. It would seem that primary responsibility for the future management of the property rests with the federal government. Federal acquisition and management would seem to be the proper answer to the problem."

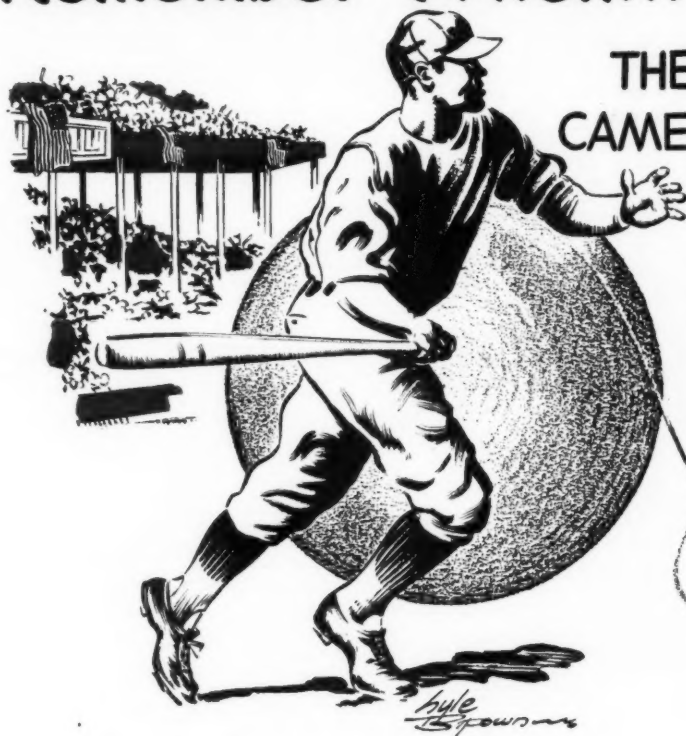
It was the federal government which negotiated the treaties with the Klamaths and their Modoc cousins long ago. It was the federal government which drove the martyred Chief Joseph from the Northwest and took his pathetic surrender 1,000 bloody miles eastward in Montana. It was the federal government which mistakenly ordained the premature termination over the Klamaths in 1954. And yet, by a curious irony, it is this same federal government which is best equipped and staffed to manage in perpetuity the tribal timber holdings of the Klamath Tribe and to safeguard the marsh where pilgrimages of ducks and wild geese may find nesting, breeding, and feeding grounds.

We have 148 magnificent national forests today. They provide timber stumpage, grazing uplands, watershed protection, hiking, camping, skiing, fishing and hunting for Americans in virtually every realm of our nation's life. Why not make this number 149? I am certain that the "Klamath National Forest," acquired from the progeny of the earliest Americans, would be a worthy inclusion in the great system of outdoor preserves which President Theodore Roosevelt and his forester, Gifford Pinchot, founded nearly half a century ago.

I have emphasized that, despite some of my real misgivings with respect to the administration bill, I consider it far superior to even any remote thought of permitting termination to run its disastrous course under Public Law 587.

The dumping of 4 billion board-feet of pine timber on Oregon's already sagging lumber market could lead to economic ruin for Indian and non-Indian alike. After a careful canvass of the situation prevailing in the Senate and House, I came to the conclusion that the administration's proposal, which I introduced "by

Remember When...



THE "RABBIT BALL" CAME TO THE DIAMOND!

THE GAME OF BASEBALL WAS REVOLUTIONIZED IN THE 1920'S BY A LITTLE BALL OF YARN...A CHANGE TO AUSTRALIAN YARN IN THE MANUFACTURE OF BALLS MADE POSSIBLE TIGHTER WINDING AND A HARDER, LIVELIER BALL!

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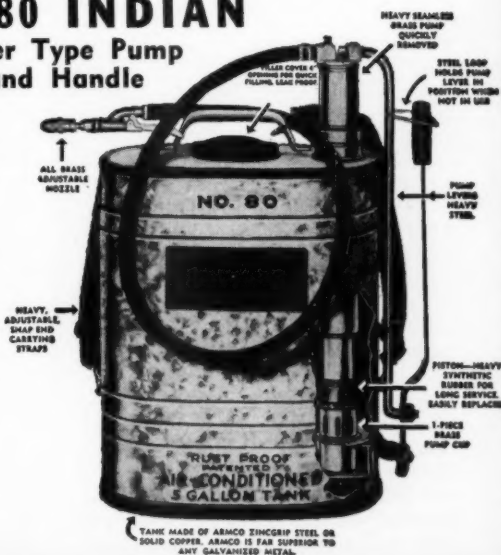
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request" on January 16, had a somewhat better likelihood of enactment than my own outright federal-purchase proposal.

A number of Senators, disturbed over the substantial sums required to buy the Klamath forest and marsh, told me that they believed private purchasers should have first refusal of the timber before the federal Treasury was tapped to finance the undertaking. This included Senators of both political parties.

Accordingly, I decided to sacrifice pride of authorship and any sense of partisanship, in an effort to try to make certain that chaos in the lum-

ber industry of southeastern Oregon can be prevented.

On March 6, at a meeting of the Senate Indian Affairs subcommittee, I urged my fellow members to report S. 3051, the Administration bill, with certain clarifying and improving amendments. For example, I suggested that the sustained-yield covenant be required to run for 100 years rather than 75, because of the slow-growing qualities of ponderosa pine. Senator Arthur Watkins of Utah, ranking Republican member of the Subcommittee, was completely cooperative in working with me toward this goal. As a result, the Indian

Affairs Subcommittee approved the bill. In view of the fact that a substantial segment of the Pacific Northwest's economy may be at stake, I felt that an outcome was infinitely preferable to a prolonged partisan controversy which might have followed insistence upon my own bill.

I could have waged a prolonged fight for S. 2047, at some political credit to myself, but the principal victims could have been the Indians who own the Klamath timberlands and the Oregon communities which depend upon the raw material of the Klamath forest as the source of their livelihood.

Trail Call!

(From page 39)

historically with such picturesque figures as Fremont, Bonneville and Jim Bridger. Two great peaks, Fremont and Gannett, towering more than 13,500 feet above the sea, guard this roadless kingdom of timberline trees, broken rock, snow valleys, ice and solitude. Lakes are countless, nameless—many of them sparkling jewels. The alpine flora of the range is unequalled—purple daisies, paintbrushes, primroses, kings crown, gentians, and hundreds of others.

The indescribable beauty of the high Colorado Rockies, enclosing an alpine realm of rushing streams, evergreen forests, flower-spread meadows and high perched blue lakes awaits the Trail Riders who will explore the Maroon Bells-Snowmass Wilderness in the White River and Gunnison National Forests, Colorado, from August 5 to August 15 and again on August 16 to August 26. Bob Davis, of Fort Collins, Colorado, will guide the riders through this land, which was once inhabited by the Ute Indians.

From his U Bar Ranch in Neola, Utah, Bob Davis also will operate an expedition in the High Uintas Wilderness, Ashley National Forest, Utah. Rugged red peaks and glacial cirques mirrored in numerous lakes, forests of lodgepole and Englemann spruce, vast grassy basins bright with flowers, and swift clear streams and colorful canyons typify this magnificent wilderness. The Uintas are one of the nation's few east-west mountain ranges. One band of intrepid Trail Riders will ride and camp in this vast and varied country from July 22 to August 1. Lakes and mountain streams afford excellent opportunities to fish for rainbow, brook and cutthroat trout.

In the Sawtooth Wilderness of serrated mountains, lakes and majestic pines in the Sawtooth and Boise National Forests of Idaho, two more parties will check in at Sun Valley for expeditions scheduled for the dates of July 29 to August 8 and August 12 to August 22. Ted and Phyllis Williams, of Stanley, Idaho, will guide and service the riders who elect to travel in this spectacular mountain country with its pine forests, rugged peaks and crags, sparkling lakes and clear, swift-running streams for a memorable experience.

The little known San Juan Wilderness, in the heart of the mountainous San Juan National Forest of Colorado, will be the scene of two expeditions—August 12 to August 22 and August 25 to September 4. For natural beauty of the grand and rugged type the San Juan cannot be excelled. It is a paradise for mountain climbers, botanists, geologists and nature lovers. Its many streams and lakes, hidden within the shadows of this rugged hinterland, abound with trout, and within its boundaries wildlife of various kinds, including big game, as bear, elk and deer, is abundant. The outfitting for the San Juan riders again will be handled by the Hotter Brothers of Durango, Colorado, whose excellent services have helped make the trip one of the most popular in the annual program.

From August 4 to August 15, Bob Nicholson, of Spanaway, Washington, will guide Trail Riders through the Eagle Cap Wilderness of the Wallowa and Whitman National Forests of eastern Oregon. Often called the "Switzerland of America," this spectacular mountain wilderness is a country of jumbled peaks, in-

triguing alpine basins and thundering streams. Mule deer and other wild animals and birds inhabit the forests. Fishermen will find excellent trout fishing in the lakes and streams. A feature of this trip will be a climb to the summit of Eagle Cap Mountain, 9675 feet above sea level.

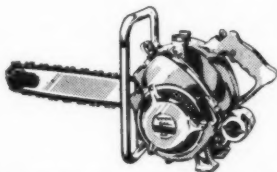
In the colorful Southwest lies the last stronghold of wilderness in north-central New Mexico—the Pecos. This wilderness of sweeping forests and open parks in the Santa Fe and Carson National Forests is dominated by Truchas Peak and is a dramatic stretch of timberline. Streams are fast and clear and numerous small lakes are tucked away in remote corners of the high country. An inspiring and thoroughly enjoyable adventure awaits Trail Riders registering for this trip, scheduled for September 8 to September 19. Douglas O'Bannon of the Mountain View Ranch in Cowles, New Mexico, will service the group again this year.

On July 14, a group of canoeists will assemble in Ely, Minnesota, to explore one of the continent's greatest water wildernesses—the Quetico-Superior Wilderness of the Superior National Forest in Minnesota. For ten days the Trail Riders will travel through this vast country of tree-studded islands, broad connecting lakes and rushing white water. The Quetico-Superior Company of Ely, Minnesota, under the management of Bernard and Florence Carlson, will service the expedition. Mrs. Carlson is the daughter of the late Fred W. Handberg, and the business is being conducted in the same fine tradition Trail Riders have enjoyed in the past.

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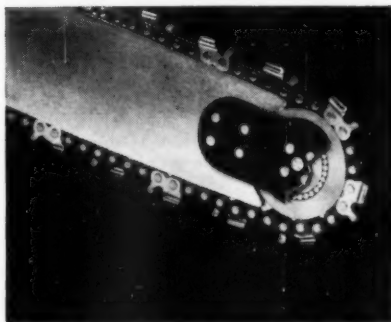
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Sun River Medicine

(From page 26)

game range in the last few years. A resident population of both species has been building up and the state has tried to reduce them by special hunts in the early fall. Sun River was set up to winter mountain elk, and resident herds use too much of the needed winter forage.

The Sun River Elk herd still has its problems and the latest two are serious. A reclamation dam has been proposed for Sun River just below the convergence of the North and South Forks, which would flood the valleys of both branches. The location is eight miles above the game range and would have no direct effect, but the impoundment created would cover important spring range and the heaviest used elk calving grounds. Most important would be blocking all the principle elk migration routes from the game reserve to the winter game range. Elk would soon establish new routes out of the mountains, but these would terminate many miles to the north and south of the game range, and thus seriously effect its use by the elk. Proponents of the dam have been quiet for sometime, but once a project like this is desired, it will always be a danger.

The most dangerous problem is that of the oil leases. When the 4,144 acres of public domain was withdrawn for wildlife, exception was made to oil and gas leasing, control of which was retained by the federal government. Complete leasing authority was delegated to the State Office, Bureau of Land Management of the Department of the Interior.

Some leases were already in existence, but these were due to expire in a few years. Under withdrawal procedures of this type, lands are assigned by the Bureau of Land Management to the United States Fish and Wildlife Service for administration. The Fish and Wildlife Service then signs a written agreement with the state and turns over the actual management of the land to the state game department. In March 1956 officials of the Montana Game Department were amazed to learn that six leases had been issued, and the six in existence at the time of the withdrawal had been extended another five years. All this without notification of the Fish and Wildlife Service or the Game Department as BLM regulations suggested if not required. Both of the wildlife agencies be-

lieved they should have had a chance to protest the leases, and ask for a public hearing. It was, of course, too late for this once the leases were issued. All the wildlife people could do was hope there would be no oil drilling. The State Land Board and the Game Commission have refused to give leases on their lands in the project.

To date no drilling has started, and as the oil leases start expiring in 1958, conservationists are hopeful. They also hope that future oil and gas leasing will be prohibited as provided by the new regulations. However, oil drilling is under way only twenty air miles away (on withdrawn land in a state waterfowl area). An oil discovery there could easily stimulate exploratory drilling on the Sun River leases.

If the producing oil companies who hold leases on the Sun River lands are concerned with good public relations, they have a magnificent chance to build public good will in the Sun River case. All they need to do is announce they will refrain from drilling and will not make application to renew their leases as they expire. Then the companies should support the request of the wildlife agencies that further leases are to be forbidden on the Sun River Game Range. Favorable publicity would be quick, substantial, and a good business investment.

The Sun River Story is one of success in building and maintaining a large herd of elk. The old refuge management methods and the new winter range acquisition program have been blended to successfully maintain a large herd of America's finest game animals. Hunting here is a wilderness or semi-wilderness type, no "firing lines" are there and none can exist under present management methods. Commercial developments whether needed or not, will jeopardize an important economic and recreation asset. Montana wildlife enthusiasts are ever alert to safeguard this magnificent project.

Sun River elk are wild. The effect of one diesel drilling would be disastrous. When an elk herd can be scattered twenty miles by a man on foot, the impact of oil exploration and production can only be imagined. The Sun River Game Range can be either an elk winter range or an oil field. White Man's Medicine will have to choose. It cannot be both.

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The Buckeyes

(From page 27)

long—about twice that of the other two. The flowers of Ohio buckeye are greenish yellow and have a disagreeable odor giving rise to the name "fetid buckeye."

Ohio buckeye leaves have five leaflets, the others five to seven. The fruit of yellow buckeye is different from that of the other two in that it has a smooth husk without prickles. In Ohio buckeye the spines are more slender than in horsechestnut.

The stout twigs have large terminal buds which in horsechestnut are protected during the winter by a shiny, sticky gum. Buckeye leaf scars are large and are marked by prominent black dots called bundle scars.

The buckeyes are not favored for ornamental purposes despite their attractiveness when in flower. The chief fault of the trees is they make so much litter on the ground. In summer they shed their flowers, in late summer and fall their coarse leaves, and in late fall large quantities of fruit. The prickles on the

husks of Ohio buckeye and horsechestnut are particularly objectionable. The trees should be grown only in large areas, as in parks. They are easily propagated from seed.

Horsechestnut makes a good shade tree but the leaves often turn brown in late summer from a rust disease and do not have an attractive autumn color as does the Ohio buckeye. There is a variety called Baumann horsechestnut (variety *baumanni*) with double flowers in clusters about twelve inches long. It does not bear fruit which makes it a much more desirable tree.

There is also a hybrid (*carnea*) which is a cross between the horsechestnut and red buckeye (*Aesculus pavia*)—a shrub or tree of southeastern United States. It is called red or ruby horsechestnut, has scarlet or deep red flowers and grows to a height of 50 to 70 feet. The leaves are composed of five leaflets and the tree is said to be more resistant to the rust than horsechestnut.

Over the Iron Curtain and into the Woods

(From page 18)

cisms of our systems and techniques. And we want you to help us solve the most important problem of all—the defense of peace."

E. G. Richards of the United Kingdom was elected chairman. Ivan Sudnitsen of the U.S.S.R. became first vice chairman after I had nominated him. Professor J. M. Venet of France, was second vice chairman, and I was elected *rapporteur*, a high-sounding title for secretary. The proceedings were translated into five languages through our head sets.

We got well acquainted with the Russian delegation which consisted mainly of deputy ministers of the timber industry. During the conference seven papers were acted on, covering various operations in the woods, including the one on worldwide accident reporting which I had prepared in June; and others on tractor testing, use of tractors in the mountains, and training forest workers. Twice a day uniformed waiters brought us *fruitos* water, something like slightly fermented strawberry pop. The exchange of technical information was very free. For example, I brought home specifications of their major woods machines, as

well as about 100 pamphlets and publications of various kinds.

Minister Orlov went out of his way to give preferred treatment to the U. S. delegation, and especially to me, I suppose because I represented the U. S. Government. He sat next to us at evening banquets, circuses, football games, ballets. I remember sitting in the Czar's box, all surrounded with red velvet and gold brocade at a ballet in Lenin-grad, arranged gratis by the government. The Russians' attitude throughout our stay was friendly, polite, seemingly sincere in trying to satisfy our every want and in asking our advice about woods problems.

There were homely touches and joking too, as there usually is among foresters. Orlov told us about his Canadian trip last year. He became friends with a Mr. Gibson, a millionaire from Vancouver. Orlov asked him when he was coming to Russia for a visit, and Gibson replied, "Never. You Communists would take away all my money."

Vice Minister Sudnitsin took the photo of my son Ross home to show his family, because they have a high official named Ross. Later I



Champion field crew prepares to survey another tract of company timberland as part of its ownership responsibility.



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met Sudnitsin's son, Joe, a fine looking graduate forester of 23, just returned from a bicycle holiday in the Crimea. He spoke English fluently, having learned it in one of the many schools which teach English.

One of my biggest surprises was the professional competence of the key people we met. All were foresters, most with master's degrees. The masters get paid $1\frac{1}{2}$ to 2 times as much as the others. Many of them were women. To keep these people on their toes, they are urged to spend a day a week writing books or being consultants for other ministries, for

which they are paid extra. They have career plans, periodic pay increases, retirement benefits. The work week is 46 hours which they hope to reduce to 42 this year.

One man mentioned defending his thesis when he took his master's degree. It must be written on something new and practical, and is published two weeks ahead of the "defense" so anyone interested may attend. Held in a public auditorium, the "ordeal" takes two or three hours, with questions from a scientific council as well as outsiders. Three "opponents" criticize the

thesis in detail. About 10 percent fail in preselection, an initial review by experts.

Minister G. M. Orlov gave the U.S. delegation a special audience in his chambers. As usual, he was very cordial. What could he do to make our trip more pleasant and informative? He offered to answer any questions we had about the Soviet Union. After toasts of vodka and cognac, along with eating sandwiches, cookies, and cake, the real purpose of our visit came out. He was anxious to establish a technical exchange of people and materials so we would understand each other better. "One of our greatest tasks," he said, "is to raise the level of living of all people."

One morning for breakfast I was served six slices of toast, sausage, meatloaf, 12 slices of cheese, sardines, onions and omelet, and coffee with blueberry ice cream in it. All our meals were leisurely affairs, lasting from one to three hours.

We had an elegant banquet one night on the Volga canal. The feast consisted of caviar, black bread, vodka, a baked fish course, chicken, peas, shoestring potatoes, two wines, champagne, coffee, fruit, and about 15 toasts. This was typical of the meals. All toasts are *dodna* (Russian for bottoms up) with glasses emptied and turned upside down on top of the head.

In The Woods

The second week, Minister Orlov and two of his deputies joined us on a special train which took us to the experimental logging operations between Moscow and Leningrad. The train served as our home for the next two weeks. Each of us was given Russian boots, quilted jacket, and hooded raincoat, all of which came in handy because it rained most of the tour which was mainly through swamp forests.

That first morning in the woods, Orlov talked to the group. "According to safety rules," he said, "we don't fell in windy weather, like today. We hope you won't cause us anxiety by going too close to trees being cut. You're experienced, but even the experienced get caught. Watch the cutters a few minutes, then go a safe distance away. It is our responsibility to keep you alive and send you back to your families. They wouldn't like an accident."

In the woods I saw every evidence of a good safety program. They take

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And now comes to the woods a worthy "stablemate" of the "420"—the new, more rugged-than-ever John Deere "440"—destined to establish, in its own right, a reputation as a

dependable, aggressive member of the logging "crew." Here again, thrifty and amazingly efficient John Deere power heads a list of features that spell big savings in man-hours, fuel, and upkeep.

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accidents seriously. It's too bad for those who slip up. There can be a 10 to 20 year prison sentence if one causes injuries to others. If the victim lives, he may plead for you. If he is killed, it is hard to prove you were not at fault.

Vice Minister Sudnitsin told me about their plans for a radically new machine, operated by one man, which would harvest timber products as it cuts a swath through the forest similar to a combine in a wheat field.

They are not satisfied with the labor output per man-day—much lower than ours—and are mechanizing operations as rapidly as possible to increase it.

We had a ride on one of four experimental rudderless and propellerless timber patrol boats powered entirely by water jets. The boats have proved their worth, they said, and about 100 of them will be in use next year.

They demonstrated Druzhba (friendship), their one-man gasoline power saw. It was developed after they studied saws from all over the world, including some of our own. Ours, they said, were too fatiguing because one had to bend over to use

it, and fumes were bad. Druzhba has a handling frame built up so that one can stand erect and operate it.

One morning Mark Townsend and I got up early to see if our guided tour was hiding anything. We went through a sawmill and box mill. Without an interpreter we couldn't talk with the workers, but their smiles showed that we were welcome. Safety was definitely a part of the work pattern. In the box mill men handled the heavy logs. Six women operated smaller saws. They wore goggles, used push sticks, stood to one side of the saw, just as we train workers to do. Many safety signs adorned this small shop. Shop housekeeping was excellent. The log conveyor outside—about 600 feet long—had a stop wire overhead. It was not to be started except by the person who stopped it, a good safety rule for anybody anywhere.

Special safety examinations are conducted twice yearly. In one logging camp of 600 workers, the safety committee had 10 members, one a full-time safety engineer. Workers get a month's vacation every year.

One interesting safari I made alone to the safety division of the timber ministry. Here I was shown many educational booklets, posters, scale models, and other exhibits. All accidents are analyzed by safety experts and new rules developed if necessary. However, the rules can't become effective until the secretary of the labor union signs them as well as the minister of the timber industry. Workers carry identification cards on which safety violations are recorded. After three violations, the person loses his card and gets demoted.

The division develops safe work clothes too, including safety helmets which are required in the woods. There were five men and women devoting full time to safety. On the day of my visit—September 27—we all had to wear overcoats inside where the temperature was about 55 degrees. Heat was not to be turned on until October 1, despite the unseasonably cold weather. Apparently this was a case where red tape was insurmountable. When I got so cold I began to shake, the assistant director, a lady, brought me two cups of coffee, cookies, chocolate, and wine. Soon I was warm again.

By law, none of the workers can use machines without training. There are 146 technical schools in forest areas. Workers are taken out

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of production for courses lasting three to twelve months. Last year, I was told, 175,000 of the one million timber industry workers were so trained.

While we're on the subject of safety, you may be wondering if it is safe for the average Russian to talk freely nowadays. They talked freely to us, with one exception. One day on a railroad station platform I was talking with a government official and his wife. Suddenly she interrupted with "Be careful, you don't know who's listening."

Our State Department advised us that we should ask or do whatever we pleased. Other than the one instance, we talked freely on all subjects, took pictures wherever and whenever we liked. My baggage was not opened by customs, and my mail did not appear to be censored. We went where we chose, alone or with an interpreter, if one was needed. We asked opinions of strangers, and apparently got frank answers.

Most of the logging we saw was "full tree"—that is, the entire tree is transported by truck or narrow-gauge railroad to an electrified lower landing where limbs are trimmed off and the stem cut into products. Whole tree logging and mechanization of woods work has cut down injury rate markedly. Axes, for example, are used only to whack off tree tips too small for the electric trim saws. Axes are one of our major causes of injuries.

One banquet type luncheon was served out in the woods, in a beautiful stand of Norway spruce and popple, at a U-shaped table with temporary roof to keep the rain off. Orlov's toast: "To peace and friendship, to forest workers everywhere, and to all women in the world." And another of his: "To safety and friendship and our will to get together. You are falling down on the job. The best persons are foresters and hunters; let's drink to these good persons. *Dodna*, let's get going."

They were testing everything, it seemed — equipment, work techniques—all in an effort to find the best ways of doing a job.

A most interesting piece of equipment was a piggyback tractor, a gigantic machine used in whole tree logging. Its base is a TD-60 tractor. One man saws the tree near the ground while a cable pulls the tree over on top of the heavily reinforced cab. With about a dozen whole trees,

it takes off across the woods. They are working on a special cutting device that will be operated from the machine.

I saw their TD-40 and TD-60 logging cats in swampland full-tree operations. These are similar to the Forest Service's Tom Cat which was developed in Region 6 a few years ago. I mentioned this on a Radio Moscow broadcast the American delegation made, and later to a reporter for *Pravda*. I hope listeners, if any, got the point that initial development was by the U. S.

In swamps where tractors can't work, logging is done with electrically powered cables and six-ton

winches. They have a two-arm skidding arch tractor weighing 50 tons, electric woods saws, cable logging, bulldozers, and tree uprooters.

All woods workers are permanent, no seasonals; in Orlov's words, "as permanent as your own personal wife." Being developed are new wheel-type tractors which they hope will be better than the track type. I saw a photo of a lumber buggy tractor with logs underslung between the wheels. This is still experimental, though. Most heavy operations are performed near towns or villages. Trees are skidded distances up to 500 meters, averaging about 150 meters.

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In 1956, the U.S.S.R., according to Orlov, cut 12 billion cubic feet of wood for lumber, pulp and fuel. Annual growth is 21 billion cubic feet, and they hope by 1975 to move annual cut figures up to the amount grown.

A pleasant afternoon was spent with Pomonovich and staff in the Ministry of Forestry. He told me, "We cut a lot of forests, but do a lot of planting and seeding. Planting plus natural regeneration completely covers every acre we cut. We hope to complete our survey of all forests this year. Smokejumpers are used extensively on fires. We are introducing a new, rapid-growth species of balsam poplar which is ready to cut in 30 years."

Explosives are used in fire fighting; also chemicals, some applied by aircraft as we are doing. Aircraft are also used for surveys and to spray chemicals for insect and disease control.

Pomonovich's foresters mark timber to be cut by Orlov's ministry. Orlov has no control over forest management, only cutting. I got the impression that the Presidium was always after Orlov for more timber, and this plus the fact that management and harvesting were under separate ministries sometimes made for strained relations.

I have a vivid impression of the competence and dedication of all the people I saw, from the ministers down to the lowest paid workers, and the determined drive by the government to get the right answers to problems through research.

I visited three large research institutes spending millions of rubles yearly. One was devoted exclusively to log floating, another to woods mechanization, and one develops standard designs for roads, bridges, houses, villages. Many men and women working for advanced degrees are studying special practical problems at the institutes.

The Russians seemed very proud of this, and, in fact, proud of the accomplishment of all their workers. They lost no opportunity to introduce individuals responsible for good work, and to give them a public pat on the back. An example was Voronitzin, director of the mechanization institute. He developed the Druzhba saw and received his country's highest award, the Lenin Medal, for it.

In Between, Around and About

In Moscow and Leningrad streets were crowded. People were poorly

dressed by our standards, but not shabby. People on the move, walking fast—lots of cossack boots, shawls on women's heads—men in double-breasted suits, bell-bottom trousers unpressed usually, and dark blue hats. Many soldiers everywhere, apparently on leave; I saw none on duty except at the Kremlin. I walked alone through some slum areas which appeared to be far worse than ours in Washington. But everywhere there were parks and boulevards for people to rest and play in, and they are used. I saw many happy family groups playing with their children.

Streets in Moscow were crowded with traffic, mostly trucks—loaded with sand, building blocks, gravel—carrying men and women to and from the job; truckloads of steel and wood and other building materials, trucks always on the move over the many wide, clean streets. Every night squadrons of sweeper trucks and tankers scrub down the streets, sidewalks, and parking lots. Following the trucks are groups of women with brooms.

To a safety man it was interesting to note that these trucks and passenger cars never used their horns. About ten years ago, I was told, traffic noise became so great that horns were prohibited by law except in emergencies. Traffic offenses bring severe penalties. Accidents have decreased considerably since then, they said.

I saw women working everywhere—mixing mortar, spading up parks—women barbers and shoeshiners, women riding on top of loaded trucks, women bricklayers, scalers, draftsmen, women working in sawmills, pulling telephone cables under sidewalks, repairing streetcar tracks and asphalt pavements, women railroad conductors and streetcleaners.

The Metropole, Moscow's subway, is an impressive thing and a statistician's delight. Escalators are larger and faster than ours, taking you rapidly down several hundred feet underground. They move 10,000 passengers per hour. Uniformed lady guards were much in evidence. I soon learned to stand and hold the rail on the right hand side. The left hand lane is reserved for those hearty souls who wanted to keep walking to go even faster.

Daily 2,600,000 passengers use the Metro, where trains operate on 1.6 minute intervals, with an average

speed of 23 m.p.h., including stops. The stations are beautiful, each depicting some central theme, like the October Revolution, the theatre, World War II, sports, or peace. They are highly polished, inlaid mosaic marble or granite palaces. Some have cut glass chandeliers, others with mosaics on the walls, depicting national historical events, and many statues. One station had 80 bronze figures, including a bust of Stalin. His name, photographs, paintings, and statues are still seen frequently in public places, but not nearly as much as Lenin's. He is everywhere you look. The stations, trains, and tracks are immaculate.

In one car a modestly dressed man heard through Zenia, my interpreter, that I was from the U.S. "America is a great, peace-loving country," he said to me, "and so are we. I hope you come back often. It will help to preserve peace." At the next station a girl gave Alex Koroleff of Canada a large bouquet of flowers as a token of friendship.

Peace! How often was I reminded of that. Many trucks have doves of peace stenciled on their sides. A dove is outlined in white on the lawn at Moscow University. I went to a circus one night and the blue velvet curtains had pax-peace-mir—peace in many languages—embossed on it in bold letters. In the finale performers turned loose white doves which flew up around the vast curtained stage. I even noticed the dove imprint on the yogurt bottle cap and the sugar cubes at breakfast each morning. I heard the same theme from housewives in the spotless kitchens of logging villages.

These expressions of friendship reached a climax one Sunday when we took an all-day excursion on the Moscow-Volga canal. While passing through the locks several boats were together, all loaded with people out for a weekend of relaxation, singing folk songs, dancing, and enjoying a lovely fall day. Suddenly the folks on the nearest boat called across to us in unison, "Druzhiba y mir"—friendship and peace.

After a dinner in our hotel one night drinks and cigars cost 61 rubles. We gave the waiter 65 rubles and told him to keep the change. He said, "Good boy," the first English he had spoken.

I made a trip through Moscow University, and found there the beautiful marble interiors that seemed so characteristic wherever

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(See Page 23)

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4-58

we went. The main building is 32 stories high. They told us if one spent a day in every room of the University, he would come out a very old man at 120 years. There are 16,000 full-time students, 6,000 evening and correspondence and 2,000 graduate students.

The extracurricular program was thriving. I saw a girl's gym class, boys in the swimming pool, an orchestra rehearsal, a theatre group in action. A surprising feature: 3,500 professors, only seven students each. The college course runs five years, free if students keep up their grades. For this, the government has the right to assign a graduate for three years in the job most helpful to the U.S.S.R.

The Leningrad Forest Institute where I visited had an enrollment of 5,000, many of them women. This was only one of 11 forestry schools. I found in the forestry curricula required courses in Marxism, Leninism, and Political Economics. There were also physical culture and sports; a short course in accident prevention, which would be an exception in a U. S. forestry school.

For those not fortunate enough to have college background, specialized schools are run at government expense. There a semi-skilled worker can prepare himself for the next higher skill.

You can get an idea of the general housing and living situation by meeting Joseph and Jane Vronski. Joe was my main interpreter. They both speak good English. His mother and sister live in New York. His sister is an art editor of one of our prominent magazines. No wonder he speaks English so well—he was born in Amsterdam, New York, of Austrian parents. He graduated from an eastern university in the late 20's and married a New York girl. At that time his only job offer came from Russia.

With misgivings he decided to take the job abroad. After several years there Joe and Jane became citizens of the U.S.S.R. He received a master's degree from Moscow University and Jane taught school for 20 years. As a scientific worker Joe is definitely "upper crust." I asked him if he were a Communist. He said, "No, although several times I was asked to join." I was told that of their 200 million population only 7 million are party members—roughly 3 percent.

For 24 years the Vronskis used the public baths when they weren't im-

posing on friends more lucky than they were in housing. They were allotted 18 square meters (nearly 200 square feet) living space in an apartment and considered themselves lucky. The average person now gets only 5.6 square meters (64 square feet). The sanitary norm is 9 square meters, a figure they hope to reach in 12 years.

The Vronskis are now doing better, with 30 square meters of space (325 square feet). I visited them in their new apartment. Their living-sleeping room is about 12 feet square. They sleep on two small cotlike beds. The kitchen, complete with water pipes and a small porcelain sink, is about 8 by 10 feet. A bathroom all their own, after 29 years, is their pride and joy.

Rent averages 4 percent of a man's salary. Joe is in charge of a small research laboratory with 25 men and women working for him. His salary is 3,600 rubles or \$360 per month at the rate of exchange we paid—10 rubles to one dollar U. S. Here are some of his monthly living expenses: rent \$5.50; heat \$1.40; hot water (central supply) \$0.70; cold water and sewage \$0.60; radio Moscow \$0.50—total 86 rubles or \$8.60.

Scientific workers are urged to share their talents with other ministries one day a week in writing articles or lecturing at \$2.50 per hour. Joe makes an extra \$100 per month for his free-lancing. Jane made \$150 per month teaching. She retired recently and now gets a pension of \$40 a month. She continues to do substitute teaching which supplements her retirement pay. Together they get \$7,000 per year—definitely upper class income, from which a 12 percent income tax is deducted. They had just ordered their first car—a Volga—like a small British car. They will have to wait 6 months for delivery.

The average worker's income ranges from \$900 to \$1,500 a year, but his rent ranges from \$36 to \$60. Bread is 20 cents a loaf; milk 25 cents a quart; gasoline 40 cents a gallon (official) but you can buy it on the black market for 10 cents. My haircut by a steel-toothed woman was 60 cents—no tips please.

Clothing is high. Goods are shoddy according to our standards. Suits cost \$100, tailored \$190; shirts \$18-\$35.

It appears that the Russian people spend half of their lives standing in line. At fruit stands there are long queues. In an elaborate grocery

store panelled with tan and brown marble and with chandeliers, you stand in line to find out how much something costs, then to another line to pay the cashier, returning to the original line to collect your merchandise. This is typical of the way you buy things in Russia. No, everything is not rosy, though there are many signs of improvement.

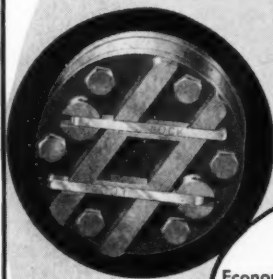
One of my last meals in Moscow was in Minister Orlov's private dining room behind his large office, in the shadow of the Kremlin. He too is a Lenin Medal holder, having re-

ceived it for his work in the timber industry during the last 12 years. I read him a portion of my wife's letter, "The neighbors here think the Russians are throwing gold dust in your eyes."

He laughed and replied, "It is true, we have shown you our best. I would like you to see our worst, too. Please stay for two or three weeks and we'll give you a trip to the Siberian forests where we're putting into practice some of the research you've seen. If you can't stay now, come back next year."

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Exploring the Needles

(From page 31)

party of jeep explorers was formed—right there on the river expedition.

This was the first of the "Kent Frost Jeep Trips." With his address at Monticello, Utah, each season for the past six years Frost and his wife Fern have conducted jeep expeditions into an almost inaccessible region of fantastic rock formations. For 1958, his trips—fourteen in all—begin May 12 and extend through September 26. The rates per person are \$25 daily, which include transportation, food, sleeping bags with air mattresses and, of course, guide services.

The guide service phase is very important, for without Frost calling attention to the geological and historical wonders one would miss much. Moreover, a competent guide is necessary so that one may enter into this untamed desert wilderness and return safely. There are no sign posts. Southern Utah which includes the Needles is the largest section of the United States without improved roads. It is a region of few water holes and offers hazards to motorists and campers not equipped for the emergency of mechanical failure.

Frost's transportation is three small Universal Jeeps. He drives one; Fern Frost, another; and Frank Wright, former owner of the Mexican Hat Expeditions, the third. Each jeep carries two passengers and a driver. Frost stows the camping equipment in the rear end.

He finds the jeep exceptionally suitable to travel over the back country roads that lead to the colorful, uncharted area. At times, the rock crevasses are barely wide enough for a jeep to squeeze through. Most of the jeep trails through the Needles were made by cowboys carving out the stock trails just enough for these small vehicles to get by.

"It takes a good steady nerve to handle a jeep," Frost said, "in some of these extremely steep grades where the loose rocks grind out from under the tires and leave the bare rock. In many places, there are square ledges about twelve inches high that the wheels have to jump over."

Frost does considerable traveling up the bottoms of dry washes. After a flood, however, they are not so dry, and upon a few occasions he has gotten a jeep stuck in the quicksand. When this occurs, he merely hooks up the capstan winch and invariably has the jeep out in a few minutes.

He keeps his equipment in perfect condition and has never broken down or run out of gas on any of his trips. Each jeep carries ten extra gallons of gasoline and that many gallons of water.

When the weather looks threatening, he carries a 10 x 12-foot tent. Two years ago, however, his reliability as a weather forecaster received a severe jolt. There had been an extended drought in southeast Utah and Frost assured Catherine and Dot Stauder, two sisters who were out for a trip, that there would be no rain and no need to carry rain coats or a tent. He pointed out that that country hadn't had showers "in years."

But how mistaken he was! The first night out they camped by the Natural Bridges. They were just ready for bed when it started raining. They quickly covered the bed with tarps. After an hour the rain was over.

The next morning, Frost laughed off his being a poor prognosticator when it came to rain and declared positively that there wouldn't be any more rain—one chance in a million that time of the year. They drove from the Natural Bridges to Nokai Dome and picked a beautiful camp site on top of a mesa. They had just gotten through with supper and put the dishes away when it started to rain hard and the clouds looked heavy with no sign of let up.

"By now," Frost reminisced, smiling, "the girls thought I had never told the truth in my life."

Fortunately, he remembered seeing an abandoned prospector's cabin about two miles from their camp. So they drove over in the jeep and made their beds in the cabin and just let it rain outside!

Incidentally, the Stauder sisters spent two weeks on this trip with Kent and Fern Frost. During this time, they traveled 1200 miles in the back country seeing new points of interest each day and they did not have to back track their route but only a few miles.

Persons of all walks of life have gone exploring with the Frosts. For instance, there are Howard W. Thomas and wife Mary, the photographers, and Otis Marston, an authority on the Colorado River. In fact, Marston and his wife Margaret, who are from Berkeley, California, frequently arrange a group to take a trip. Upon one occasion, the party

besides themselves was made up of Frank Masland, rug manufacturer, and his wife, Virginia, from Carlisle, Pennsylvania; Joseph Deslodge, owner of several fluorspar mines, from St. Louis, Missouri; Hugh Cutler, in charge of botanical gardens in St. Louis; Ballard Atherton, telephone company manager from Honolulu, Hawaii.

For cooking, the Frosts make use of a heavy cast iron bake oven. They shun such modern conveniences as gasoline camp stoves. They do their camp cooking according to the old cowboy custom—over an open camp fire. There is no trouble to find deadwood. Once the bonfire is going, the red-hot embers are raked to one side and the pots and kettles placed directly on these live embers.

The guests do not have to do any camp chores. Some of the girls, however, may assist Fern Frost with the dishes. Once they were doing that and they tried to get everybody into the act. So they went down the alphabet with the names.

When they got to D, Joe Dudziak, general traffic manager for the Parr-Richmond Terminal Co., Richmond, California, joshed that his name was not Dudziak after all, but Zodiak. They went along with the gag and passed him up that time. After that,

however, the girls made him help with the dishes every time when either the letter D or Z would come around.

The Kent Frost Jeep Trips geared for fun, relaxation, nature photography and the inspiration from an inviting region off the beaten path takes in localities rich in lore and beauty—Pegasus Arch, ancient Indian petroglyphs, Salt Creek Canyon, Dead Horse Point, Robbers Roost, Davis Canyon, Beef Basin, White Canyon, Standing Rocks, to single out a few. Frost travels from mountain peaks of 11,000 feet down to river canyons of 3000 feet.

Back in 1859, Dr. J. S. Newberry, geologist to the MacComb Expedition of that year, stated that this country was "impassable to everything but the winged bird." Kent Frost with his jeeps has proven him wrong in this.

Even so, Dr. Newberry grasped the sublimity of the scenic wonder which holds true to this day. Beholding the spires and pinnacles of solid rock, he suggested that the island of Manhattan, then thickly set with church spires, would come closest to resembling the Needles. He admitted, however, that there was really nothing anywhere to parallel these "singular objects."

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

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World of Words

(From page 19)

short, Stefferud reads each and every word of a script time and again. Perhaps he is atypical, for as he revises and rewrites, he does not use the blue pencil so popularly associated with editors. Blue pencils, of the grease variety, are solely for marking photographs and other non-textual copy. For most purposes a No. 2 government issue pencil does the job.

To use a carnival term, Stefferud is "with it" as he readies a script for the printer. He is with it from the first rough draft to the final check of page proof. Once galley proof has been scrutinized to see that all corrections, including those of contributors, are on a master copy, the yearbook editor undergoes a complete metamorphosis.

He becomes his own makeup man, and puts together a dummy or mock-up as it is sometimes called. He measures, cuts, and then pastes the proof onto dummy pages.

Stefferud has to figure copy so that there are exactly fifty-four lines for each of two columns on every page. If there are illustrations for a page, he must allow, deduct, the correct number of lines for each illustration so that both columns are still a uniform length.

This is a tough one-man job when you realize that a dummy such as Stefferud prepared for *Trees* has 944 pages, 128 chapters with heads and subheads, and numerous illustrations, including 16 full pages of color. And there are usually some tables, graphs, charts, and maps.

Stefferud has to make everything in one of his publications conform to the regulations set forth in the Government Printing Office Manual

—a unique rule book that, like so many other facets of the federal government, is a law unto itself and contrariwise to the generally accepted way of doing things.

The yearbook editor also does all the indexing for each volume. This is a monumental task in itself, for each and every entry is first jotted down on a three-by-five file card. After entries are carded and cross-referenced, they are alphabetized. Next a typescript is made from the thousands of file cards. When it has been checked and triple-checked, this final copy is marked for the printer.

Then the dummy yearbook and its illustrations, keyed for insertion in text by blue-pencil letters or numbers, are bundled off to the Government Printing Office with a prayer. But no great sigh of relief is heard in Room 541 as they are taken out the door.

Stefferud well knows that between the dummy page of any yearbook and the hard-cover stage there can be, and often are, too many slips. Pied type, transposed captions or illustrations, and other errors of minor or major significance are a possibility. An error of any kind brings down on the editor's graying head the wrath of outraged and enraged contributors. And unless there is another printing, errors achieve an immortality that is sometimes embarrassing or downright irksome for those concerned with the publication in which they occurred.

Once a yearbook is on the presses, Stefferud is immediately concerned with others for the future. In fact planning for new USDA annuals and preparing one for the printer are often simultaneous endeavors.

About two years before an annual is actually published, members of the Yearbook Committee meet to draw up a prospectus. For the 1958 publication, *Land Use And Ownership*, nineteen members convened. Committeemen have to think in terms of a diversified reader-audience. This has been estimated at one million, exclusive of those in the U.S.S.R.

Stefferud knows that he has readers in Russia, though it took him six months to get documentary proof. An Israeli scientist now working for the department passed along a rumor heard abroad that the Russians had pirated and printed *Plant Dis-*

eases, the yearbook for 1953.

How Stefferud proved that the scientist's story was more than a rumor is undoubtedly due to his years as correspondent and acting chief of a bureau for the Associated Press. He came to the AP in 1929 from a two-year teaching stint at Kemper, a military school in Booneville, Missouri.

He worked first for the AP in Des Moines, where he was a wire editor and reporter specializing in farm copy that came principally from Iowa State College at Ames. Three years later he was in New York on the foreign desk from which he was promoted to night foreign editor. After two years in New York, he went abroad in 1934.

This was not Stefferud's maiden trip to Europe. During the summer of 1929 he was in Rome as a student at the American Academy. Study here came four years after he received a Bachelor of Arts degree from St. Olaf College. At Northfield, Minnesota, this college was opened originally as a school by Norwegians in 1875. Today it is noted for the choir of its music school. It was almost predestined that Stefferud would go to St. Olaf, for he was born May 17, 1903, in nearby Kenyon, of naturalized Norwegian parents.

During his three years in Europe for the AP, Stefferud was stationed in Berlin, when he first went over, and then later in Vienna, where for a while he was acting chief of the bureau. His job let him cover Germany, Poland, and Czechoslovakia, and Austria, Hungary, Rumania, Bulgaria, and Yugoslavia.

Stefferud did not tell me how a copy of the Russian edition of the yearbook came into his hands. But it is my guess that a connection—someone whom he had befriended—in an Iron Curtain country was responsible. The Russian printers did an amazingly good job on their edition, particularly with the illustrations. For they had to reproduce from reproductions!

Without taking any Russian readers into consideration, the editor, the committee, and the contributors have to bear in mind these types, among others of yearbook readers: farmers; county agents; economists; business men; writers and others who need reference material; and, amazingly, a large number of people living in cities.

Perhaps city dwellers consider the yearbook a sort of escape literature. That is, like the editor himself, they believe without being aware of it



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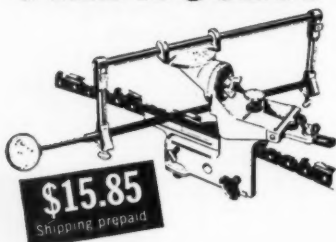
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that a man needs air around him. They get it or a sense of the wide open spaces vicariously as they read such annuals as *Grass, Water, or Trees*, the most popular yearbook and now in its third printing.

Once a subject has been selected, Stefferud draws up a prospectus. The one for 1958 is thirty-seven mimeographed pages stapled together between soft green covers. The prospectus for *Land Use And Ownership*, scheduled for fall, lists the members of the committee for this particular annual and has several pages of special notes for contributors, including a sample of how to set up a manuscript. And the purpose of the yearbook is also stated: "Our aim is to inform all Americans about the land resources of the United States, the history of their use and misuse, and the ways in which they should be husbanded and improved for the well-being of coming generations."

The newest annual, Stefferud believes, explains just how important land is and just how we can best utilize it to realize the greatest economic and esthetic returns. The condensed outline, starting on page sixteen, gives a remarkably clear outline of the subject matter in the new yearbook. Perhaps for all of us the most important part is Section V.

This concerns land resources in relation to prospective needs. It is historical in that it explains how needs for food and fiber have met in times-gone-by. It is current, for it pictures land-use in mid-century America. It anticipates the future with chapters on prospective demands for food and fiber, forest products, and other uses of land. And it concludes with a section on the balanced use and development of land and water resources.

Chapter VII, the final chapter, is "Toward The Better Use Of Land." The last sentence in this chapter is, from the way in which he spoke of it, I believe, almost a creed of Stefferud's. This is how it reads:

"The future, however, cannot be trusted to luck, but will require foresight and planning to assure judicious use of our land heritage and its maximum contribution to our well-being."

If *Land Use And Ownership* is of the same quality as other yearbooks edited by Stefferud, it will be an outstanding publication and one in keeping with the best of the series.

Past reviews of yearbooks have been complimentary. Of *Trees*, a reviewer in the *Atlantic Monthly* said: "This is an opportune book

and one of the handsomest big books I have held in my hand this year." The *Journal of Forestry's* comment was: "... the typography is of an attractiveness not often associated with government publications, and the cover is truly handsome."

Naturally such praise is mighty sweet to Stefferud, the man from Minnesota who now lives in a country where "mighty sweet," "you-all," and other expressions typical of the region are on many tongues. It is also the country in which he edited *The Wonderful World of Books*, that in the paperback edition has sold more than 200,000 copies. Here, too, he wrote *The Wonders of Seeds*, a juvenile published by Harcourt, Brace and Company, and *How To Know The Wild Flowers*, a popular guide to American flowers.

Two yearbooks edited by Stefferud, however, got more than reviewers' sweet-talk. *Marketing*, saluted by the Journal of the American Dietetic Association as "a valuable source book," and *Insects*, the 1952 yearbook, received signal honors. They were on the annual list of fifty outstanding books selected by the American Institute of Graphic Arts.

That these books "made" the Institute list is due in no small part to Stefferud. For he is the editor who almost single-handedly gets out *The Yearbook of Agriculture*—one of the world's best buys on books. And if you do not believe that, let me quote prices on these publications. They are on sale at the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.

Trees costs \$2.50; *Water*, \$2.00; and *Soil* is \$2.25. All yearbooks published since 1940 are available. And the volume for that year, *Farmers In A Changing World*, is only \$1.50. Books comparable to the annuals retail for about \$8.00.

Let's hope then that Congress, no matter what the administration, sees fit to continue appropriations for *The Yearbook of Agriculture*. Let us further hope, too, that in an unexpected burst of generosity future Congresses will increase these appropriations or at least make some provision—a special fund, perhaps—to meet the rising costs of printing. The present fixed appropriations do not permit any financial leeway to cover such exigencies as a sudden rise in paper prices.

With more money to work with, there is no telling what quiet-spoken Alfred Stefferud might give us in the way of a yearbook. As he is also something of a diplomat, it would not surprise me too much if he per-

suades the Russians to kick some rubles into a kitty to help defray the expenses of publishing the books of which he is justifiably proud.

Son of the Sierra Nevada

(From page 34)

that had caused the floor of the valley to drop.

"The bottom," Muir contradicted, "never fell out of anything God made."

Whitney then countered by saying that the glacial hypothesis was nothing more than the idea of a "shepherdherder."

The shepherdherder reference was a gibe at Muir's occupation when he first came to Sierra country. Then he was employed by Pat Delaney to take sheep to the high pastures of the range. A shepherd went along to do the actual work, while Muir supervised.

Before Muir put forth a further defense of his glacial theory, he put in three summers of field work to prove it. Each and every ice stream of the Tuolumne Divide was traced by Muir to its source. When the third summer was over, Muir had together enough evidence to prove his contention.

Ultimately Muir was credited with the discovery of sixty-five glaciers while he was mapping the high country as well as some in Alaska, where one bears his name. His Sierra Nevada findings were published as "Sierra Studies," a series of articles in the *Overland Monthly*.

From time to time Muir came down out of the mountains to deliver his completed articles to the *Overland* office. Sometimes he visited friends in various Bay cities. While calling on the Carrs, he met Louise Wanda Strentzel, whom he married April 14, 1880.

Muir's work in the field of glaciation was one instance of his being heard from. But important as it and his other scientific contributions were, they were not commensurate to the contribution he made to conservation—recently described as ethical behavior regarding natural resources.

The force that motivated Muir with regard to conservation was his worshipful love of wildness that, he once wrote "was ever sounding in our ears." (His and those of his brothers.) About 1890, when he was already established as a writer of national importance, Muir started a campaign to preserve some of America's wilderness areas.

By 1890 most of the lands in the

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Public Domain were threatened by various interests—all bent on getting as much as possible of western outdoor America. Muir began his campaign in the press with:

"It is not yet too late for the government to begin a rational administration of its forests. Tree-killers, wool and mutton men are spreading death and confusion in the fairest groves and gardens ever planted—let the government cast them out and make an end to them."

Muir's polemic statement impressed John Willock Noble, the Secretary of the Interior under Harrison. Noble drafted a bill to safeguard the tree Muir called "the king of conifers," the giant sequoia, by setting aside lands for two parks, Sequoia and General Grant, and for the establishment of Yosemite.

When Noble's bill became law in 1892, more than 1,140,000 acres of scenic America were preserved for us and our outdoor enjoyment.

With the help of a few public-spirited individuals, Muir next formed the militant Sierra Club. With it to back him, he fought a continuous battle for the preservation of more of outdoor America. The fight for the ethical use of our natural resources was continued with little or no federal aid until 1901. But in that year a new character appeared on the federal scene. Theodore Roosevelt became President.

No sooner had Roosevelt moved into the White House than Muir wrote the President the first of many letters. When Congress turned down a Roosevelt proposal, initiated by Muir, that the bureau of forestry be placed under the Department of Agriculture, so that it could be managed by foresters, Roosevelt went West.

He eluded all the lobbyists who wanted to entertain him to spend three sequestered days with Muir. The conservationist told his story to

the President. It was one of the spoliation of outdoor America by timber thefts, fights to control water resources, range damage, and the general chaos of federal administration. Roosevelt was so roused that when he returned to Washington, he immediately went into rough-riding action.

Roosevelt signed a law in 1905 that transferred sixty million acres of federal forest reserve to the Department of Agriculture. In 1907 and again in 1908, additional millions of acres were brought under the direct control of the federal government by proclamations of Roosevelt at the urging of Muir.

Muir continued to wage his battle to preserve areas of the land he loved almost to the end of his life. He only experienced defeat once; he failed in his efforts to save Hetch Hetchy, a beautiful valley in Yosemite from being flooded. The area was used as a reservoir to furnish water for San Francisco.

The fight to save Hetch Hetchy concluded only a year before Muir died—on Christmas Eve of 1914. Of his approaching death, he commented during his last illness, "This good and tough mountain-climbing flesh is not my final home, and I will creep out of it and fly free and grow."

For as long as the wind makes music in the pines of the Sierra Nevada and for as long as the first level sunbeams sting the domes and spires of the Range of Light, John Muir will be with us not only in spirit but in name.

One of the many places named for him is Muir Woods National Monument. By proclamation in 1908 Theodore Roosevelt established the monument north of San Francisco, to preserve a virgin stand of coast redwoods, *Sequoia sempervirens*.

The four hundred and eighty odd acres of the Monument at the south foot of Mount Tamalpais were donated to the federal government by Congressman William Kent and his wife, Elizabeth Thacher Kent. At their request the shady, fern-floored area with its tall, stately redwoods, standing singly or growing in circular formation, was named in honor of Muir—a man who believed that:

"In God's wildness lies the hope of the world—the great fresh, unblighted, unredeemed wilderness. The galling harness of civilization drops off, and the wounds heal ere we are aware."

Half a century or so after the death of John Muir, fifty-three million people a year experienced in some degree "fresh, unblighted, un-

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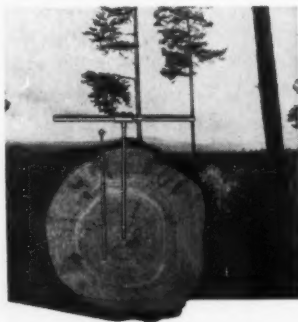
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redeemed wilderness." This was possible because one man believed so strongly in the ethical use of natural resources that he fought to make that belief a reality.

Let's Face It

(From page 29)

protection, b) prevent man-caused fires.

The first federal assistance did not become available until the Weeks Act of March 1, 1911. It appropriated \$200,000 for cooperation with any state "in the protection from fire of the forested watersheds of navigable streams." To qualify, a state must enact laws for forest fire protection and provide matching funds.

New Hampshire entered into the first cooperative agreement on June 2, 1911. The amount of federal money was \$7,200, sufficient to hire 24 patrolmen at \$2 a day from June 1 to October 31. Minnesota, Maine, New Jersey, Wisconsin, Vermont, Connecticut, Oregon, Maryland, Massachusetts and New York signed similar agreements within two months. North Dakota became the 44th and most recent cooperating state on August 12, 1955. Arizona, Kansas, Nebraska and Wyoming still do not participate.

In his initial prophetic report, J. G. Peters, Chief of State Cooperation from 1911 to 1928, said: "I am exceedingly enthusiastic over this work and the opportunity given for the most practical kind of cooperation with the states. I look upon it as the beginning of a great work in protecting the forests of the country from fire, especially those of the eastern states."

Although a great forward step had been taken, fire protection did not advance as rapidly as hoped for. The initial \$200,000 appropriation was not supplemented until 1914 and for years after that did not exceed \$100,000 at any one time. Consequently the states continued to carry much of the burden.

Over 166 million acres of private forest land still were without protection when the Clarke-McNary Act was signed in 1924. This bill contained authorization for annual appropriations of \$2,500,000 for cooperative fire protection but the actual sums provided by Congress never reached this amount until 1942.

Year by year state and federal agencies inched toward the goal of basic protection for all forest and

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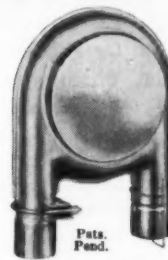
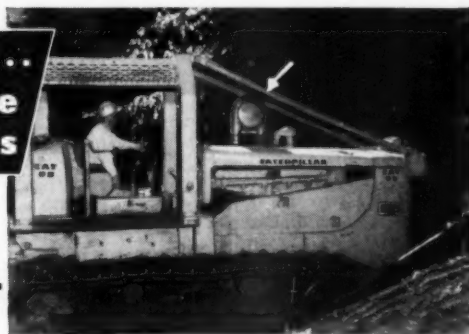
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TABLE 2—FOREST FIRE CONTROL EXPENDITURES¹—CM2

FISCAL YEAR	SOURCE			TOTAL
	FEDERAL	STATE AND COUNTY	PRIVATE AND OTHER	
1948	8,604,955	12,830,532	2,064,527	23,500,014
1949	8,572,593	17,200,919	2,101,948	27,875,460
1950	8,550,890	18,121,195	2,261,440	28,933,525
1951	8,996,176	21,884,522	2,279,355	33,160,053
1952	8,960,230	23,733,999	2,902,877	35,597,106
1953	8,946,327	26,459,731	2,309,970	37,716,028
1954	8,934,188	28,394,919	2,105,685	39,434,792
1955	8,945,085	28,168,296	2,102,903	39,216,284
1956	9,484,733	30,636,884	2,271,604	42,393,221
1957	9,385,652	33,801,838	2,149,016	45,336,506

¹ Direct expenditures by the states exclusive of federal administration and special services such as the Smokey Bear campaign. The total federal appropriation was \$9,000,000 in 1948 and \$10,025,000 in 1957.

watershed lands. By 1945 the unprotected area had been reduced to 134 million acres. In 1950 all but 71 million acres were under protection (*American Forests* June 1950).

Meanwhile, expenses have been rising. The total estimated cost now to provide basic protection is \$83 million compared to the \$48 million estimate of 1950. The major contributing factors are: a) a need to increase the intensity of protection in accordance with the increase in values being protected; b) increased salaries and wages; c) general increase in the cost of doing business.

This poses again the major question of availability of funds. The federal authorization now is \$20,000,000 annually but so far Congress has only provided about half that amount. State and private sources

put up \$36 million in the 1957 fiscal year. Some people feel that the additional needs also should come from state and private sources. Others feel a more equitable division of effort is required. In any event \$83 million is the estimated cost of providing nation-wide, basic protection—nearly twice the amount now being appropriated.

In an effort to obtain an unbiased opinion as to who should pay, the U. S. Forest Service has contracted the services of the Battelle Institute for a nation-wide survey. The results are being awaited with interest. But whatever the Institute's recommendations may be, there is one objective on which all agree.

All forest lands must be protected adequately from fire.

Seaton Addresses Wildlife Conference

(From page 9)

River, I must oppose it. I have no choice.

The Pittman-Robertson and Dingell-Johnson funds are now providing twenty-one and a half million dollars to the states for sport fisheries and wildlife programs—the largest annual amount in history.

In the Havasu Lake National Wildlife Refuge in Arizona, water is now being diverted from the Colorado River into the Topock Marsh, ending the stagnation due to federal dredging operations which began in 1949. This is helping to restore the area to its former excellence as a wintering ground for migratory waterfowl.

The Department of the Interior and the Department of the Army last year reached an agreement, acceptable to conservationists, by which a

buffer strip was made available to Fort Sill in the southern part of the Wichita Wildlife Refuge. This agreement eliminated a serious threat to the refuge and its intended purposes. The department has no intention of reducing the effectiveness of this outstanding wildlife area by opening more of its acreage to military use. Of that I can assure you.

The Congress has recently passed the so-called Military Land Withdrawals Bill, H. R. 5538 — which makes applicable on military lands the fishing, trapping and hunting laws of the states and territories in which they are located. It also stipulates no military withdrawal of more than 5,000 acres can be made without consent of Congress. The Interior Department has wholeheartedly supported this legislation.

Much has been accomplished. There is still much to do.

It is time to make constructive amendments to the Fish and Wildlife Coordination Act of 1946. This is a legislative must. And the sooner it is done, the better.

The Department of the Interior is now working with other federal agencies on just such amendments, which would legally require that greater consideration be given to fish and wildlife conservation in the planning of federal water resources projects. In brief, the proposed amendments will go beyond the present legal protection against damage to fish and wildlife values. They will actually require the enhancement of these values. We have made good progress toward getting agreement with other federal agencies. As soon as that job is done, I shall at once submit the proposals to the Congress and strongly urge their enactment.

Second, we urgently need legislation to establish a National Outdoor Recreational Resources Review Commission. The Administration is now enthusiastically supporting that before the Congress. It will lay a base for application of recreational resource criteria to include wilderness and associated values in any comprehensive survey of this Nation's lands. The sooner the commission can get on with its job, the better.

Because of the impending termination of federal trusteeship over the lands of the Klamath Indians, we need legislation which will continue the sustained-yield management of the forest and preserve the marsh as a wildlife area. The Administration has sponsored such legislation. The marsh, purchased by the Department of the Interior, would become a wildlife refuge. The forest, kept intact, would continue in perpetuity to produce timber on a sustained-yield basis; to help prevent floods; and to protect the migratory waterfowl, deer, and other wildlife which now find refuge within it.

There came to my desk yesterday a recommendation for the solution of the Klamath-Tule Lake problem. Because of its complexity, it has required extensive and sympathetic study by my immediate staff and by the Assistant Secretary for Water and Power and the Assistant Secretary for Fish and Wildlife. Upon my return, I shall resume work on this problem myself. We will make every effort to announce a decision within the next few weeks.

Fourth, we need special legislation enacted in this session to authorize

metalliferous mining by lease or permit only for the proper protection of the proposed new Arctic Game Range.

As you know, I have taken steps to set aside this nine million-acre area in northeast Alaska for the protection of grizzly and polar bears, Dall sheep, wolverines, caribou, and migratory waterfowl. This single addition to the Nation's wildlife system will send the acreage of federal wildlife lands soaring to a new record total.

Fifth, we need to make certain that nothing defeats the purpose of the new regulations which govern oil and gas leasing on federal wildlife lands.

As you know, these regulations provide that on federal wildlife refuges, there will be no leasing except when governmental oil reserves underlying such lands are threatened by drainage of nearby drilling. On the game rangelands of the United States, the Bureau of Land Management and the Fish and Wildlife Service will together determine which areas should be opened to leasing and drilling. Similar regulations will also apply to the federal-state cooperative lands and the wildlife areas in Alaska. The approval of the Secretary of the Interior must be obtained in any case.

Recently a congressional question has been raised about the validity of these new departmental regulations. I have been informed hearings will be scheduled on this subject. Let me assure you, that I stand ready to defend my action.

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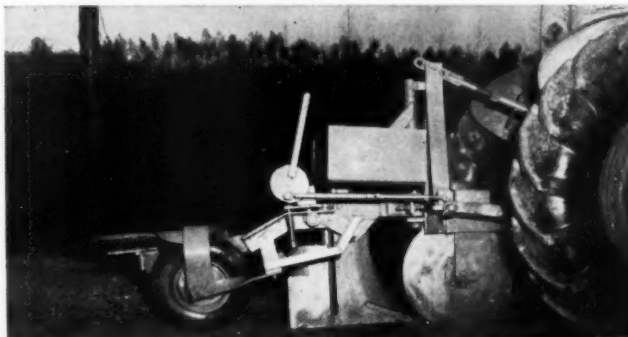
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Finally, we need, even more than ever before, continued and strengthened public support for all constructive conservation measures.

The half-century behind us is rich in legislative and administrative achievement in the field of federal natural resources management, conservation, use and development.

Even so, we must continue to forge ahead.

I propose to you that each of us launch a sort of personal "Mission 2000," not for one resource but for all of them. With the utmost diligence, let us continue to work together to assure that the latter part of this twentieth century, as the first, will be an era of outstanding brilliance in American conservation.

Forest Forum

(From page 4)

and, yes, even the whims and fads of the public. Vast sums are spent each year to attract tourists in that highly competitive and precarious field. Hunting and fishing resources depend considerably upon the weather, the efficiency of fish and game management agencies, and upon the natural pressures of growing local populations. But through it all, the tax base of ranches, mines and lumber mills remain relatively stable.

Another important reason that the multiple-use principle must be preserved is that of precedent. If graziers, or any of the other users, are arbitrarily prohibited use of the natural resources in the forests, then all other users are in jeopardy of the whim of bureaucracy. Carrying this thought to an extreme, would not the hunters be shunted aside if the skiers claimed "exclusive" rights to a forest area? Might not the fishermen lose their privileges if municipalities prevail upon forest administrators to erect "barriers" around their real and potential watersheds? The principle would be the same.

Less than a fraction of a percent of our human population has ever, or is likely, to visit a "wilderness area" in the foreseeable future. Are they more important, economically, morally, and logically, than those "3.6% cows?" Such comparisons are obviously asinine.

Lyle Liggett
American National
Cattlemen's Association
Denver, Colorado

EDITOR:

Several of us have read the article "Our Social Responsibilities" in the January 1958 issue of AMERICAN FORESTS Magazine which described, in a forceful manner, the competition between wilderness preservation and economic use.

We do not take issue with the references to domestic livestock grazing on areas administered by the National Park Service to illustrate the problem. We are only too well aware of our responsibilities in the matter of reconciling this nonconforming use with the basic objectives for which national parks and monuments were established.

However, the article does seem to give

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an unfair impression of the over-all situation. It highlights our remaining problems and gives no credit for the substantial progress we have accomplished. No mention is made of the fact that it is one of our important objectives to reduce and eventually to eliminate grazing from the scenic and scientific national park areas. That most of the present grazing was "inherited" by the National Park Service when areas were transferred to us from the jurisdiction of another federal agency, or by acceptance of life tenure commitments when private lands were acquired is also not discussed.

The whole problem needs to be examined in order that fair and impartial appraisal and solution can be arrived at. It is an extremely complex matter, as you will no doubt agree. From the national economic standpoint, the value or volume of livestock grazing on national park areas is insignificant. For that matter so is the park wilderness use on the areas affected by the grazing at the present time. On the other hand, in the local economy and for the livelihood of individuals and of their families, grazing is of vital importance.

We have reluctantly accepted, as opportunity offered, otherwise qualified and desirable areas and purchased private lands with grazing commitments rather than not have them at all under park control. That this has, in the long run, been wise from the standpoint of "conserving . . . for the benefit of future generations," our primary objective, seems to be evident from the record. The amount of domestic livestock grazing under permit has been reduced by more than half during the past ten years on western national parks (including that on some mentioned in your article). As the MISSION 66 program progresses, we expect to improve further this situation. For example, through a long time pending exchange of land involving the state of Arizona and the Bureau of Land Management, the giant Saguaro cactus area in Saguaro National Monument was transferred from the State to the National Park Service. Fencing of the entire cactus area has just been completed and livestock are now excluded from that threatened area. Acquisition of base private property within an area is an important factor in affecting reduction of open-range grazing.

At some time in their history most of the western national parks and monuments, except Yellowstone, were grazed by domestic livestock. Today only 19 of these areas still have grazing under permit which includes a few with only public stock driveway commitments. There are also some unauthorized grazing problems due to lack of fencing. It has been possible by negotiation, acquisition, exchanges, fencing of boundaries, and by fair dealing with local stockmen to eventually accomplish the desired objective in most areas.

We are not complacent or unaware of the effects of continued grazing. A number of ecological and other range studies have been made. We agree that additional staff and attention to this matter are important to provide "a positive program of management." That management, however, must be of a type which leaves the areas apparently unmanaged, but to do this requires intelligent and often quite intensive controls.

We do not believe that the picture of conserving for future generations outstanding wilderness areas in national parks and monuments is as dark as the article described it. It is true that we need many things to expedite our program. However, in the long run, we believe that we will be able to maintain and restore the quality

of the areas entrusted to our care.

E. T. Scoyen
Associate Director
National Park Service
Washington, D.C.

EDITOR:

Richard J. Hartsveldt's article "Litter—Our \$100,000,000 Disgrace" is excellent. Are there any reprints available? If so, I'd appreciate one.

Our County Board of Supervisors have had a "Litter Bug" officer appointed this week.

Mrs. Mary Ann Linsdale
Jamesburg Rt.
Carmel Valley, California

EDITOR:

I have just read with intense interest the article on "Litter—Our \$100,000,000 Disgrace" by R. J. Hartsveldt, in the January issue of AMERICAN FORESTS.

I did not believe there was a place in the nation that is as bad as our Gulf Coast for the indiscriminate and reckless strewing of garbage, litter, etc., on U.S. Highway 90 and in our parks and camp sites. I honestly believe that I have seen every article of human apparel and consumption scattered over the highway, camp sites, beaches, etc.

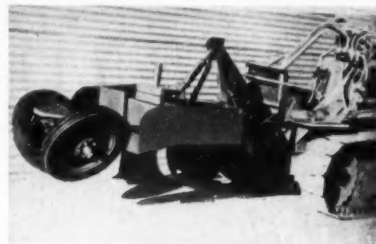
Like some of the instances cited by the author of the article, it costs one state Highway Department two thousand dollars each year to remove this debris. On some of the most heavily travelled highways the crews have to clean up the Right-of-Way as often as three times a year.

I have written a local paper and have been commended by our state highway department for the articles, but I do not believe I have made the slightest impression on the travelling public.

It seems to me that legislation carrying penalties is the only recourse we can have towards improving the situation.

Again let me say, it was a splendid article and I hope will have a far reaching effect.

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AFA Board Meets

(From page 6)

ownership in California shows that:

"1. Such national and state studies should recognize the relationship between land management and the 'public interest,' and should aim to identify the objectives that will contribute most to such interest from the local, state, and national points of view.

"2. They should give full consideration to the potentialities and limitations of multiple-use management.

"3. They should appraise the effect on private land management of public policies in such fields as public regulation, public assistance, and taxation.

"4. They should evaluate the effectiveness of the policies, administrative practices and management techniques of different classes of owners (both private and public) in advancing the public interest.

"5. In the light of these facts, they should indicate what changes in the present pattern of land ownership would be desirable.

"6. Since conditions are never static, studies of the problems con-

nected with the ownership of forests and other wildlands, at both the national and the state levels, must be continuous. They must also provide for the coordinated participation of the different classes of owners and users and of the general public."

Other Recommendations

S. 3247 and H.R. 10633. To amend the Mining Laws. AFA recommends deferment of these proposals during the current session of Congress because the Forest Service and the Bureau of Land Management are making substantial progress toward cleaning up existing claims and any marked change in the law at this time would inject confusion into an orderly program.

H.R. 10746. Appropriation for the Interior and Related Agencies. In a statement to the Senate Subcommittee AFA said:

"We are shocked by the appalling devastation caused by fires in Alaska last year. Five million acres of public forests, wildlife ranges and waterfowl nesting grounds were destroyed. Not only was the native village of

Paimuit burned, but the means of human existence were lost through death of wildlife and destruction of the vegetation upon which game animals live.

"Our inquiries indicate that the agency responsible for protection of these lands, BLM, did a herculean job with the meagre facilities available. But we fear a repetition of last year's disaster. Suppression of the 1957 fires required the obligation of five times more money than had been allocated for the purpose. Yet no provision is being made this year for urgently needed facilities and equipment."

A similar statement regarding Forest Service funds labeled the one and one-half million dollar, 85 percent cut in cooperative tree planting "too severe," demanded extension of fire control to the 40 million acres still unprotected, urged greater emphasis on the problems of the small woodland owner, recommended increased emphasis on utilization of forest products, and pointed to the continuing destruction caused by insects and disease.

The Blight of Politics

(From page 8)

tration machinery is a Model-T structure in a swept-wing age. Indiana once could boast of having one of the most progressive fish and game programs in the Middle West, but that was only for a decade. In recent years, the Hoosier state has changed administrative personnel so often that only a confirmed optimist could expect to occupy the director's desk and plan ahead for more than a year or two.

"The state forestry program in Indiana is in no better condition," Dr. Gabrielson declared. "Employees of all conservation agencies in the state are subjected to the vicious political assessment program that compels all employees to contribute to the faction or party in power."

"In Oklahoma there has been a similar lack of continuity in the game and fish administration . . . (although) Oklahoma voters, by a large majority, in 1956 passed a constitutional amendment which was planned to remove the affairs of the new Department of Wildlife Conservation from partisan political in-

terference. Commissioners are now appointed for staggered terms of office with one vacancy occurring each year, and the director can be discharged only for proper cause after a public hearing. Both moves were steps in the right direction.

"Unfortunately, however, in protecting the organization from partisan politics, the state legislature, in its vitalizing act, left the door open for the kind of political meddling which Webster called 'factional interest.' The act permits the state legislature to void or negate any rules or regulations passed by the commission, and on its face it appears to remove power from the governor and place the same power in the hands of the legislature. This definitely was not the intent of the voters, and it looks as though they may have traded one type of political interference for another. Certainly the activities of several state senators in recent months strongly suggest a determined effort to use the department for political purposes."

Politics in Louisiana

Factional politics can play hob with state conservation departments, even where there is practically no turnover in political power between parties, Dr. Gabrielson continued. The latest example of this can be found in the recent history of the Louisiana Wildlife and Fisheries Commission. For many years, Louisiana was close to the bottom of all states, no matter what standard was used to judge the efficiency or effectiveness of wildlife administration. Under the leadership of the Louisiana Wildlife Federation, the state in 1952 finally pushed through a constitutional amendment designed to protect the commission from political tampering.

Under the new departmental administration established by the amendment, the status of the Louisiana department rose rapidly, the speaker said. Within a year or two, it was recognized as one of the most progressive in the nation. But when Governor Long assumed office the

director was fired and a new director appointed by a commission packed by the governor through legally questionable tactics.

"Almost overnight, Louisiana slipped into the old ways," Dr. Gabrielson declared. "After this raid, Governor Long immediately began a campaign to make his wrecking job permanent by trying to push through a new amendment which would repeal the constitutional status of the state wildlife agency."

This move was repudiated by the voters by a three to one majority. Today, under a new administration the state Wildlife and Fisheries Commission is moving forward again . . . "but it will be a long time in recovering from the disruptive forces that all but shattered it two years ago."

give to laymen eyes with which to see the world about them. This book, as a case in point, leads us directly to perceptions we had not imagined, to understandings of the natural world that had escaped us completely. Scientifically, it is the finest sort of interpretive writing.

Gifford Pinchot, The Man Who Saved the Forests, by Dale White. (Julian Messner. 1957. 192 pp. \$2.95.)

This is a biography for 'teen-agers—very young 'teen-agers, I would assume. It is simple in concept, painfully clear in execution, and always dramatic. Scout masters and junior high school librarians will find it grist for their mills.

Forest Service. In the lower echelons of government forestry, the grassroots administrator, the man in the field, any application of that uncommon commodity, common sense, must be viewed with suspicion until the regulations are consulted to see if it is in accord with the ponderous productions of gray matter far removed from the problem. The carefully documented results of their own excellent Forest and Range Experiment Stations are often ignored because they seem to be at variance with some official's opinion of what constitutes good silviculture. These, then, are the "leaders in conservation" that you would choose to advise small woodlot owners.

These "leaders" would be expected to advise the woodlot owner on the economics of good forest management. It would appear that they should first put their own financial house in order. The U.S. Forest Service, with more appropriated funds than ever before, is failing miserably in the Western United States in its attempt to reach its self-imposed annual cut. Forest Service

Forester Fired

Turning to yet another state, Dr. Gabrielson said the present governor of Kentucky removed a competent state forester because he would not play factional politics with his organization. A similar situation could prevail in Florida if present proposals for a constitutional revision of that state are accepted by the people. This proposal affecting the fish and game agency would remove the earmarking of fish and game license funds and would place complete control of both revenues and personnel of the department in the hands of the governor.

"In other words, the proposed 'improvement' would unquestionably

pave the way for a prompt return to the worst kind of politically controlled administration," Dr. Gabrielson said. "Florida got away from that sort of thing a few years ago, and the politicians are making a supreme effort to get control of the fish and game funds and personnel again for political patronage."

In laying about with a shillelagh, Dr. Gabrielson had at both Democrats and Republicans alike, and then marched into the field of associations. Domination of any citizens' organization by either special political or special interest groups is sheer suicide, he said, in pointing to one such group that "died without a whisper" when special interests got in the saddle.

Reading About Resources

(From page 35)

Forest Nursery Practice in the Lake States, by J. H. Stoeckeler and G. W. Jones. (Forest Service, USDA. U. S. Government Printing Office. 1957. 124 pp. \$2.00.)

Here is a real treasury of tried and proven information, gathered over a period of 25 years, concerning the highly technical skills of nursery operation in the cold, windy Lake States region. Authors Stoeckeler and Jones have distinguished themselves in this field. Now they add to their laurels with a book that will be used until it is dog-eared by everyone concerned with the propagation of forest stock in this particular section of the country.

Forest Soils, Their Properties and

Relation to Silviculture, by S. A. Wilde. (Ronald Press. 1958. 537 pp. \$8.50.)

If you ever saw a book that was not meant for the amateur, this is it; but it is hard to imagine a professional trying to get along without it. *Forest Soils* treats its subject from two directions: Part I, Soil as a Medium for Tree Growth; Part II, Soil Science and Silviculture.

This is the most modern, comprehensive treatment available to the forester of a subject that is gaining in recognized importance each year. Dr. Wilde, professor of soils in the University of Wisconsin, has made a major contribution in authoring this work.

What Other People Say

(From page 10)

personnel, on a rigid 40-hour week, accomplishes about half of what industrial foresters do in the same area of operation. The Forest Service never admits a mistake, financial or otherwise, with the result that many small operators are placed in financial jeopardy when purchasing government timber sales. This governmental stubbornness should not be the criterion of a good leader, and certainly not the guiding principle of an economic advisor.

Today the failure of the U.S. Forest Service to process badly needed salvage, sanitation, and thinning sales is causing the forced liquidation of small private holdings. It is in the power of the U.S. Forest Service to take leadership now by giving "economic" leadership. The national forest system was established to act as a reserve of timber with which to bridge any gap between the time of cutting off mature private forests and the time these lands could have a new forest crop. It is high time this objective was realized.

For a few decades during the first half of

this century the U.S. Forest Service actually exerted leadership and a guiding hand in the education that brought the American public to an awareness of the importance of the nation's forests. The nation must now translate ideas, theories and findings of research into everyday management practices on large and small timber holdings of private, federal and state. This requires more than the favorable public attitude which accepted the platitudes, warnings, and high minded theories of an educational program. Forestry today needs a favorable economic climate and tax structure. For the small timber holding to continue as a managed, annually productive property, we need cessation of artificially created timber famines. Small mills and logging ventures need raw material from the public forests at prices they can afford to pay and still survive.

The AFA is to be complimented on its "tilting" with forestry "windmills" in the rarified atmosphere of Capitol Hill. However, why not take the bull by the horns?

The lumber industry of the nation did when it started and supported the American Tree Farm System and Keep Green Program. These two movements have accomplished more in 15 years than U.S. Forest Service leadership did in 50. What private forestry needs is not more "red tape" or "ivory towers" but aggressive leadership in applying the foresters' technology to small private timber holdings. Your association is missing a real bet by not stepping in and developing an effective program to fill this vacuum.

Who is going to do this job? Why not AFA? We agree with your closing statement, "Let's get the job done," but suggest adding, "with private enterprise."

Francis S. Thomas
Peter A. Barendregt
Box 83
Dufur, Oregon

EDITOR:

Your February editorial entitled "Let's Get The Job Done" suggests a ten-fold increase in federal appropriation for cooperative forest management activities.

As head of a firm offering professional forestry services on a fee basis, frankly I am both dismayed and discouraged to learn that The American Forestry Association as a matter of policy proposes to support such action.

Over a ten-year period we feel that we have helped to bring a substantial acreage into wood production. In nearly every instance the time-tested American profit motive has governed decisions of those who have paid us for services. Therefore, I seriously question the idea of providing "free" services out of the public treasury, particularly when the sincere users of such services are willing and able to pay for them directly.

Thus far, the Michigan cooperative forest management program has helped more than hurt our business. I shudder to think of a ten-fold increase in its scope, however. Would it be fair to expect our clients to pay us for the same services they could get "free" elsewhere?

We feel that an increase in both educational and demonstrational activities on the part of government and industry would be more in line with our American way of life. Furthermore, ever-increasing encouragement to the consulting forester would be in order.

Thomas F. Schweigert,
President
Northern Tree Company
Petoskey, Michigan

EDITOR:

You used the word "haircurling" in your February editorial. That is too strong a word, but in a general way it describes my astonishment when I read the editorial; because the views expressed differed so widely from what I had understood to be the views of The American Forestry Association.

It would appear that you have lost all faith in the private enterprise system; at least so far as forest management is concerned. You assume without question that "the job can be done" by the Forest Service if given enough authority and enough taxpayer's money. You make no attempt to justify these assumptions, despite the fact that a large percentage of the public does not agree with them.

Why do you have so much faith in the conclusions of the Timber Resource Review of the Forest Service? Shouldn't some of the conclusions be taken with a few grains of salt? Certainly, many former con-

clusions of the Forest Service were found to be quite inaccurate.

You call for leadership and proper planning and at the same time specify the direction in which you want the leader to lead and the kind of planning you want done. Wouldn't it be better to take a close look at the facts first? Half-baked planning and misguided leadership are possibilities that should not be overlooked.

How would your plan help the "millions of woodland owners—who have less than enough markets for any wood they do try to manage and sell?" The farmers were in the same situation a few years ago before they had the benefit of government planning and financial help. The Forest Service is a branch of the same Department of Agriculture that has been "helping" the farmers. What reason do you have for believing that political intervention will not be as harmful to woodland owners and to the economy as a whole as it has been in the case of the farmers?

I am a tree farmer and have been a practicing forester for 38 years. I, too, have attended many forestry meetings and listened to the moaning of speakers who were not satisfied with the progress being made in forest management. It has been my experience that most of the moaners were not willing to invest any of their own time or money in growing trees. They wanted someone else, preferably the taxpayers, to finance the project and hire them at suitable salaries to do the planning. In the meantime private enterprise was actually doing something about forest management on a surprisingly large scale.

S. J. Hall
Gualala Redwoods
1307 Parsons Drive
Santa Rosa, California

P.S. I have just read the account in the February *Journal of Forestry* regarding the billion trees planted in 1957. The following paragraph interested me particularly:

"Eighty-six percent of the tree planting was on private lands and 14 percent on public lands. Twenty years ago only 26 percent was on private lands while 74 percent was on public land."

EDITOR:

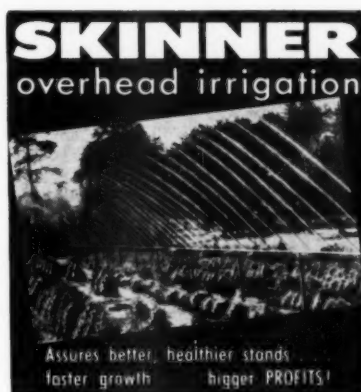
I have been told that The American Forestry Association is preparing a resolution recommending that Congress increase Cooperative Forest Practice Act to \$15,000,000—ten times the amount of the current appropriation.

Since one primary effect of that act is to replace private enterprise with government regulation and service in an area where free enterprise is presently operating in a healthy manner, I cannot believe that my information is accurate.

Remembering the admirable stand in opposition to the socialization of our forests through government regulation taken by the AFA some years ago, and the restatement of that stand in an editorial in the AMERICAN FORESTS more recently, it seems incredible that the AFA would so reverse itself. I find it particularly unbelievable because I have had your personal assurance that the AFA wants to promote the welfare of the consulting branch of forestry.

I very much hope that my information is in error, and that in fact the AFA is continuing its support of the highest traditions of our free enterprise economy, and of forestry as a free professional field.

Edward Stuart, Jr.
President
Eastern Forestry, Inc.
Consulting Foresters
Hampton, Virginia



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PROPOSED SALES OF TIMBER KLAMATH INDIAN RESERVATION, OREGON

Sales of tribally-owned forest lands and other types of property on the Klamath Indian Reservation will be made pursuant to requirements of Public Law 587 of the 83rd Congress, as amended by Public Law 85-132 of the 85th Congress. The anticipated sales program will provide for sales of the forest property in economic timber units. If the present law is unmodified during the second session of the 85th Congress, the sales will start during the late summer of 1958 and altogether will include a total volume of timber that may be as much as three billion (3,000,000,000) board feet of sawtimber and 1,200,000 cords of pulpwood. The law requires that the sales program be completed and payment made to the beneficiaries on or before August 13, 1960. The sawtimber volume is predominantly ponderosa pine, with associated sawtimber species comprising a minor part of the total volume. The pulp volume consists primarily of relatively low grade lodgepole pine. The sawtimber species will be sold in units of various sizes that will be classed either as reserve stand located in areas which have been cutover under a selection type harvest or virgin timber stand on areas which have not been cutover. The sizes of economic timber units will be classed as: (1) small economic timber units will be those of less than 5,000 acres, (2) medium-sized economic timber units will be those between 5,000 and 20,000 acres in size, and (3) large economic units will be those exceeding 20,000 acres in size. The total sawtimber volumes for the economic timber units will range from a low of approximately 50,000 board feet to a high of approximately 300 million board feet. The sales will include both forest land and timber located thereon. The terms of sale will be for cash payable within no longer than 90 days from the date of notice of acceptance of bid. Although purchasers will be urged to operate the property purchased on a sustained yield basis, the sales will be made to the highest bidder regardless of the intent for which the purchase is made. The primary requisite of the sales program will be to obtain the highest price possible for the beneficiaries of the program. Further information concerning the sales program, including information on sizes of units, volumes of timber, characters of stands, allowable annual cuts under sustained yield management and rates of growth can be obtained from the Klamath Management Specialists, 139 South 7th Street, Klamath Falls, Oregon. Advertisement of specific economic units will be made at a later date. Those desirous of being informed by mail of each offering should request the Management Specialists to include them on the mailing list. Dated this 20th day of January, 1958 at Klamath Falls, Oregon. T. B. WATTERS, Chairman, Klamath Management Specialists.

PUBLIC RECREATION ON PRIVATE FORESTS

MILLIONS of acres of commercial timberland are serving as playgrounds for America's exploding population, according to a nationwide survey conducted by American Forest Products Industries. The survey, first of its kind ever taken among owners of commercial timberlands reveals that many privately-owned acres are open to the public for hunting, fishing, camping, picnicking, hiking, skiing and other outdoor activities.

In making public its findings, AFPI said the survey covered 74 per cent, 46,263,852 acres, of the commercial timberlands owned by forest industries in this country. Although some timberland must be closed to the public for fire and logging safety as well as for silvicultural reasons, the survey reflects an important contribution by forest industries to the country's recreational needs.

Mr. Charles A. Gillett, AFPI's managing director said, "A great majority of the 455 companies covered in the survey are tree farmers—that is they are engaged in the growing of timber as a crop on taxpaying lands. The primary purpose of a tree farm is to grow timber as a crop to serve the nation's needs for wood, but wildlife, recreation, fishing, water and soil conservation are inherent parts of tree farming. That's why, under the tree farm concept, we can have the wood we need as well as the outdoor recreational values cherished by every American."

The survey revealed that 42,737,567 acres, or 92.4 per cent of the total area covered in the survey, are open to hunters in season. Exclusive of game refuges, only 2,635,037 acres, or 5.8 per cent of the total area surveyed are closed to hunting.

A total of 44,567,852 acres of industrial timberlands, or 96.3 per cent of the total area surveyed, are open to fishing. There are 55,928 miles of lake and stream banks within these lands from which anglers may cast their favorite lures.

Sixty-five companies have gone so far as to establish public parks. The

survey shows 132 of these parks, some of them elaborately equipped with free overnight facilities and services. Five companies have parks open to employees only. Thirty-one companies were planning to open additional parks during 1957, the year in which the survey was completed, but 69 other companies listed plans for such parks in the future.

Common recreational facilities provided at many of these company parks include picnic tables and benches, fishing, firewood, swimming, toilets, garbage pits, overnight camping, boating, parking areas, boat ramp, running water, stoves and others. Six companies offer skiing in season, and two of them operate tow lifts for the skiers.

In a few cases, service charges are made, mostly for fern picking, trapping and camping.

The survey shows 90 companies with a total of 13,908,504 acres require permits for major activities, such as berry picking, horseback riding, picnicking, rock hunting, hiking, swimming, camping, winter sports, trapping and fern picking.

Seven companies, the survey revealed, employ professional recreational planners to achieve the greatest recreational programming for the public good.

Some 3,328 miles of hiking trails are open to the public.

In a single year, 1956, companies included in the survey estimated that 1,533,795 persons used their lands for recreation, including hunting and fishing.

Companies finding it necessary to keep their lands closed because of forest management requirements, said Mr. Gillett, find splendid cooperation from sportsmen for the most part. "I think the survey makes it clear that there is a wide area in which industrial timberland owners, sportsmen and other recreationists can cooperate," he added. "This cooperation already is reflected in better fire protection and better understanding of forest management as well as game management."



The survey as it pertains to hunting developed these interesting statistics: Thirty-one companies employ game management specialists to work with hunters and fishermen to improve the game-fish supply; 32,377,567 acres, or 70 per cent of the total area survey, are open to all without permit; 7,437,964 acres, or 16.1 per cent of the total area, are open to all with permits; 2,922,107 acres or 6.3 per cent of the total, are open with permit to neighbors and special groups; 1,987,074 acres are leased to 625 hunting organizations; 3,269 hunting camp sites are leased to hunters; 104 companies give special consideration to game in their harvesting operations; and 44 companies plant game food species—8,637 acres.

Big game opportunities lure thousands of hunters annually to managed timberlands owned by the forest industries as evidenced by a big game "kill" of 127,490 animals in an average year.

Many companies reported light to serious damage to reforestation efforts and timber by deer, porcupine, beaver and other animals.

To better the lot of the nation's fishermen, 22 companies were engaged in stocking of streams; 41 others were taking other steps to improve fishing on lakes and streams within their timberland properties. At the time of the survey, 228 lakes had been built by these forest industries.



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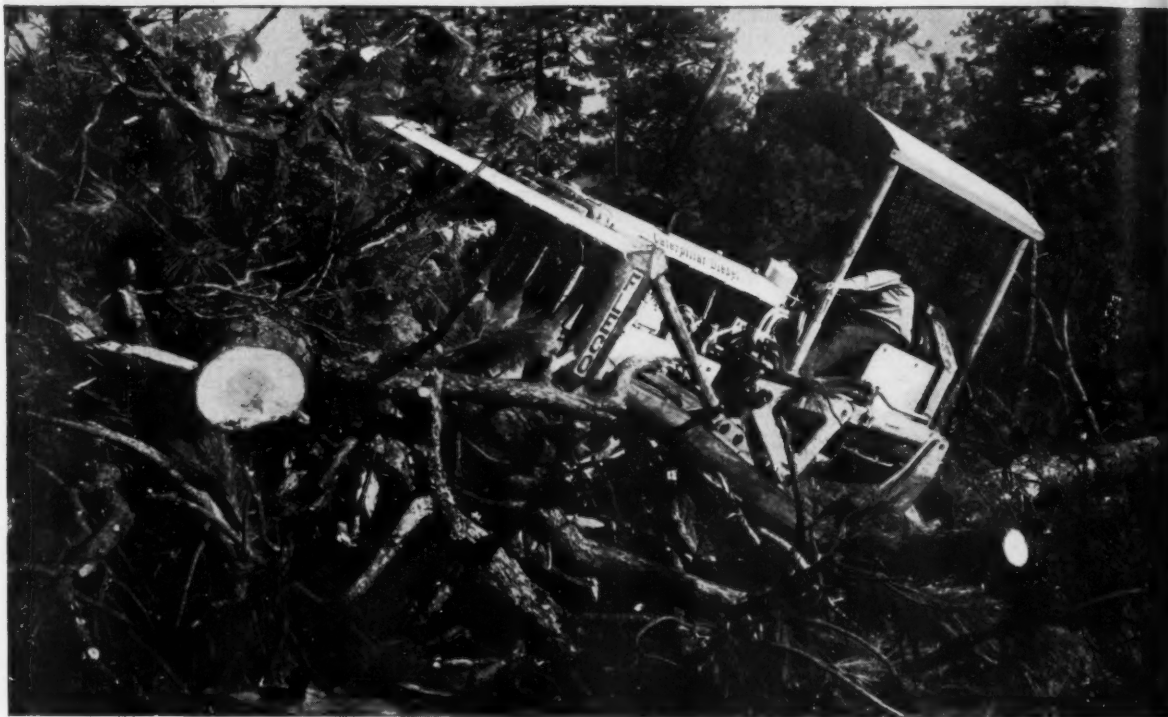
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